



Bristol Health and Wellbeing Board

Title of Paper:	Annual Health Protection Report for Bristol
Author (including organisation):	Katie Porter/Brianna O'Malley BCC
Date of Board meeting:	24 th February 2022
Purpose:	Oversight and assurance

1. Executive Summary

This annual health protection assurance report covers the period April 2020 – March 2021. The report provides an overview of the status of health protection priorities, targets and recommended actions identified by the Health Protection Committee in 2020.

The table below outlines the executive summary of this report with the updates in each section highlighted below and the action plan in each area. The continued response to the COVID-19 pandemic has impacted the availability of some data to fulfil this report, with some key data sets for the year 2020/ 21 not having been

produced.

Area	Updates	Actions	
Tuberculosis (TB)	No new updates provided	New TB action plan for England 2021 has been launched	
Health Care Acquired Infections (HCAI's)	↓ 25% BNSSG reduction in MRSA (but Bristol remains an outlier with 80% of cases)	Chlorhexidine pilot in quarter one 2021/22	
MRSA	↓ 7.4% reduction in cases in Bristol		
E.coli	↓12% BNSSG reduction in E. coli ↓ 5.3% reduction in cases in Bristol	Improvement plan developed for 2021/22	
C.Diff	↑ Significant increase in <i>C.diff</i>	Deep dive review 2020. Collaborative process started in July 2021. C.Diff working group established.	
Sexual Health	↓in STI diagnoses ↑syphilis	Data quality issues Use data to determine inequalities. Targeted population health.	
	HIV Rates remain high	Fast Track Cities	
	Chlamydia Screen Change published	Focus on targeting young women only in 2022	
Foodborne Illness	↓715 to 509 reported cases	BCC continues to work closely with UKHSA	
Food Safety Inspections	≈ 4,000 backlogged inspections	Aim to reduce by 2022 with EHO contractor support.	
Port Health Work	OOHS introduced	Continued COVID-19 and Infectious disease response.	
Immunisations	MMR and Dtap-TPV remain of concern	Work to restart on the Bristol Elimination Strategy	
Shingles	↓ Vaccination uptake	August 2021 public awareness campaign	
Flu	Programme expanded to include 50-64 yr. olds 2-3 yr. old uptake low	Expanded programme continues	
Cervical Screening	Remains low and lower than South West Average	Delays due to the pandemic	

Bowel Screening	No updated rates data available	Recovered backlog in July 2021	
Breast Screening	Rates remain static	Awaiting updated data	
Air Quality	↓Reduction in pollutants	A Clean Air Zone (CAZ) is in development with plan to implement from in 2022.	
Avonmouth	↓Reduction in complaints	Community Oversight Group established.	
Emergency Preparedness, Resilience and Response	NSRA published 60 protests COVID-19 support	Updates due 2022	
Refugee and Asylum Seeker Health	Bristol Hotel Contingency Initial Accommodation Outbreak Feb 2021	Continued support to improve and protect health	
Global Burden of Disease	↓Measles HIV Global Issue	The Lancet's special issue on Global Burden of Disease (GBD), Oct 2020	
COVID-19	31,075 positive cases 47% male, 53% female	Local Outbreak Management Plan	
Hospitalisations & Deaths	5,085 positive people admitted to hospital 611 deaths	Local Outbreak Management Plan	
Vaccinations	6% adults fully vaccinated (16+) 42% received first dose	Vaccination programme continues	

2. Purpose of the Paper

To provide the Health and Wellbeing Board with oversight of the work to protect the health of the population from infectious diseases, screening for cancers, monitor vaccination programmes, respond to health emergencies and to have assurance that action is being taken.

3. Background and evidence base

The annual report gathers data from a variety of national and local health protection data sets to present an overview of the performance of the city in addressing health protection issues and measures against national targets. This enables the Health Protection Committee to agree a workplan for the coming year across the partnership.

The One City Plan includes the priority to reduce health inequalities. Health Protection impacts on health inequalities. Infectious diseases are more prevalent in areas of poverty and higher density households and they have more severe health outcomes in groups that suffer inequality.

4. Community/stakeholder engagement

Contributions to this report came from BCC Health Protection team, the wider BCC Public Health team, BCC Environmental Health, BCC Civil Protection, Public Health England, BNSSG CCG, and NHS England. The report has been shared with the Health Protection committee, and the BNSSG CCG Governing Body.

5. Recommendations

This report enables the Director of Public Health to provide assurance to the Health and Wellbeing Board (H&WB), that the health of the residents of Bristol is being protected in a proactive and effective way.

The board is asked to approve the report and the approach we are taking.

6. City Benefits

The health protection actions enable the population to be protected from infectious diseases, identify cancer at an early stage and address health emergencies.

7. Financial and Legal Implications

None

8. Appendices

The main report is in Appendix 1 (next page).

Bristol Health Protection Annual Report 2021



April 2020 to March 2021

Report Author

Brianna O'Malley, Senior Public Health Specialist Bristol City Council

Contents

Bristol Health Protection Annual Report 2021	3
	3
Acknowledgments	6
1. Introduction	8
1.1 Executive Summary and Action Plan	9
2. Tuberculosis (TB)	12
Infection Prevention and Control (IPC) – Health Care Acquired Infections (HCAI's)	19
3.1 MRSA Methicillin Resistant Staphylococcus Aureus	20
3.2 Clostridium Difficile	21
3.3 E.coli	22
3.4 Other Blood Stream Infections (BSI's)	23
3.5 Seasonal Influenza Vaccination Rates for Frontline staff	23
4. Antimicrobial Resistance (AMR)	24
4.1 Antibiotic prescribing	24
5. Sexual Health	25
5.1 COVID-19	25
5.2 Sexually Transmitted Diseases (STI's)	25
5.3 Rapid STI Testing	27
5.4 Swab Shortages	27
5.5 High Rates of HIV	28
5.6 Fast Track Cities	29
5.7 HIV testing	30
5.8 HIV Pre Exposure Prophylaxis (PrEP)	30
5.9 Common Ambition Bristol	31
5.10 Relationships and Sexual Health Education	31
5.11 SHIP HIT	31
5.12 Chlamydia Screening Changes	31
5.13 Partner Notification in primary care	32

5.14 Expanding Access to PrEP	32
5.15 Fast Track Cities	32
5.16 Sexual Health Promotion	32
6. Environmental Health, Public Protection Work	33
6.1 Foodborne Illness	34
6.2 Food Safety Inspections and Interventions	35
6.3 Port Health Work	35
7. Screening and Immunisations	39
7.1 Childhood immunisations	40
7.2 Shingles	40
7.3 Pneumococcal	40
7.4 Flu	41
8. Screening	42
8.1 Screening Programmes	42
8.2 Cervical Screening	42
8.3 Bowel Screening	44
8.4 Breast screening	46
8.5 Antenatal and newborn Screening	47
8.6 Diabetic Eye Screening	47
8.7 AAA Screening	47
8.8 Increasing screening uptake and equity of access	47
9. Environmental hazards to health, safety and pollution control	49
9.1 Air Quality	49
9.2 Air Quality Management Area	50
9.3 Avonmouth	51
10. Emergency Preparedness, Resilience and Response (EPRR)	52
10.1 Control of Major Accident Hazards (COMAH)	
10.2 Interruption to Water Services	52
10.3 Warning & Informing	52

10.4 Avon and Somerset Local Resilience Forum (ASLRF)	52
10.5 Protest and Public Order	53
10.6 COVID-19 Response	54
11. Refugee and Asylum Seeker Health	55
11.1 Use of Bristol Hotel as Contingency Initial Accommodation	55
12 Global Population Health	56
12.1 Global Burden of Disease	56
12.2 Measles	56
13. COVID-19	58
13.1 Timeline	58
13.2 Cases	60
13.3 Hospitalisations	61
13.4 Mortality	62
13.5 Vaccinations	63
13.6 Bristol specific	64
13.7 Serious Incidents	66

Acknowledgments

This report has been produced following a prolonged period of considerable pressure on the Health and Public Health systems following the COVID-19 pandemic response and it's not over yet.

My grateful thanks to the Bristol team, particularly Katie Porter for your support in producing this report. Thanks also to all members of the Bristol Health Protection Committee and programme leads all of whom have continued to support both essential health protection work at the same time as supporting the Bristol COVID-19 response.

Brianna O'Malley, Senior Public Health Specialist

29th November 2021

List of Health Protection Committee Members and Report Contributors

Christina Gray	Director for Communities and Public Health, Bristol City Council		
Indira Barker	Team Leader Public Protection, Bristol City Council		
James Bayliss	Lead Quality and HCAI Manager, Clinical Commissioning Group		
Joanna Copping	Consultant in Public Health, Bristol City Council		
Steve Crawshaw	Programme Co-ordinator for Sustainable City & Climate Change Service, Bristol City Council		
Dylan Davies	Team Leader Public Protection, Bristol City Council		
Simon Dicker	Senior Public Health Specialist, Bristol City Council		
Sam Eddy	Director's Assistant to Christina Gray, Director for Communities and Public Health		
Adrian Jenkins	Public Protection Manager, Bristol City Council		
Emma Kain	Screening and Immunisations Lead, Consultant in Public Health, NHS England South West Public Health Commissioning		
Donna Liggins	Civil Protection Manager, Bristol City Council		
Tracy Mathews	Senior Public Health Analyst, Bristol City Council		
Julie Northcott	Consultant in Public Health, Bristol City Council		
Brianna O'Malley	Senior Public Health Specialist, Bristol City Council		
Katie Porter	Consultant in Public Health, Bristol City Council		
Sophie Prosser	Principal Public Health Specialist, Bristol City Council		
John Twigger	Principal Public Health Specialist, Bristol City Council		

1. Introduction

This annual health protection assurance report covers the period April 2020 – March 2021. The report provides an overview of the status of health protection priorities, targets and recommended actions identified by the Health Protection Committee in 2020.

The continued response to the COVID-19 pandemic has impacted the availability of some data to fulfil this report, with some key data sets for the year 2020/21 not having been produced.

In the last year, our health and public health systems have been under immense pressure and we have been reminded again of the inequality in the level of risk that different individuals and groups are exposed to.

Health Protection risks and issues reveal these inequalities, just as COVID-19 continues to do. We also recognise the Bristol specific inequalities faced by our residents.

This report is a reminder of the range of communicable disease and environmental risks which we need to address as part of the continued COVID-19 Recovery.

An action plan will be developed to address the issues identified in this report. Our next assurance report will be produced in September 2022 covering the period from 1st April 2021 to 31st March 2022.

Christina Gray
Director of Public Health
16th December 2021

1.1 Executive Summary

The table below outlines the executive summary of this report with the updates in each section highlighted below and the action plan in each area. The continued response to the COVID-19 pandemic has impacted the availability of some data to fulfil this report, with some key data sets for the year 2020/ 21 not having been produced.

Area	Updates	Actions
Tuberculosis (TB)	No new updates provided	New TB action plan for England 2021 has been launched
Health Care Acquired Infections (HCAI's) MRSA	↓ 25% BNSSG reduction in MRSA (but Bristol remains an outlier with 80% of cases) ↓ 7.4% reduction in cases in Bristol	Chlorhexidine pilot in quarter one 2021/22
E.Coli	↓12% BNSSG reduction in E.coli ↓ 5.3% reduction in cases in Bristol	Improvement plan developed for 2021/22
C.Diff	↑ Significant increase in <i>C.diff</i>	Deep dive review 2020. Collaborative process started in July 2021. C.Diff working group established.
Sexual Health	↓in STI diagnoses ↑syphilis	Data quality issues Use data to determine inequalities. Targeted population health.
	HIV Rates remain high	Fast Track Cities
	Chlamydia Screen Change published	Focus on targeting young women only in 2022

Foodborne Illness	↓715 to 509 reported cases	BCC continue to work closely with UKHSA
Food Safety Inspections	≈ 4,000 backlogged inspections	Aim to reduce by 2022 with EHO contractor support.
Port Health Work	OOHS introduced	Continued COVID-19 and Infectious disease response.
Immunisations	MMR and Dtap-TPV remain of concern	Work to restart on the Bristol Elimination Strategy
Shingles	↓ Vaccination uptake	August 2021 public awareness campaign
Flu	Programme expanded to include 50-64 yr. olds 2-3 yr. old uptake low	Expanded programme continues
Cervical Screening	Remains low and lower than South West Average	Delays due to the pandemic
Bowel Screening	No updated rates data available	Recovered backlog in July 2021
Breast Screening	Rates remain static	Awaiting updated data

Air Quality	↓Reduction in pollutants	A Clean Air Zone (CAZ) is in development with plan to implement from in 2022.
Avonmouth	↓Reduction in complaints	Community Oversight Group established.
Emergency Preparedness, Resilience and Response	NSRA published 60 protests COVID-19 support	Updates due 2022
Refugee and Asylum Seeker Health	Bristol Hotel Contingency Initial Accommodation Outbreak Feb 2021	Continued support to improve and protect health
Global Burden of Disease	↓Measles HIV Global Issue	The Lancet's special issue on Global Burden of Disease (GBD), Oct 2020
COVID-19	31,075 positive cases 47% male, 53% female	Local Outbreak Management Plan
Hospitalisations & Deaths	5,085 positive people admitted to hospital 611 deaths	Local Outbreak Management Plan
Vaccinations	6% adults fully vaccinated (16+) 42% received first dose	Vaccination programme continues

2. Tuberculosis (TB)

NB: Since our last report, there has been no update provided to the currently reported dataset for Bristol Local Authority Area or the South West, however, a new TB Action Plan for England 2021 has been launched.

Tuberculosis (TB) is a "notifiable disease", so must be reported to government authorities. In England TB has been identified as a public health priority due to the health, social and economic burden of the disease. The rates of TB and the risks of delayed diagnosis, drug resistance, and onward transmission are greatest among socially marginalised, under-served populations such as illicit drug users and the homeless.

Summary points:

- The TB incidence rate in Bristol remains statistically significantly higher than England's average. In the last 3 years 2018-20 the average number of notifications in Bristol was 49 per year.
- There were 49 notified TB cases in Bristol in 2018, an almost 20% decrease since 2017. The annual rate per 100,000 population has also decreased from 13.3 in 2017 to 10.6 in 2018 the lowest rate since 2002.
- Among Core Cities, Bristol's TB incidence rate is 4th highest after Manchester, Birmingham, and Nottingham.
- In 2019 88% of pulmonary TB cases started treatment within 4 months of symptoms onset higher than England's average of 69.1%.
- Although the prevalence of TB in the general population has reduced during the 5 years of the TB Strategy, people with social risk factors (SRF) are the one group with increasing levels of infection (PHE Annual Report 2020).
- The TB action plan for England, 2021 to 2026 will improve prevention, detection, and control of TB, enabling the UK to meet its commitment to the World Health Organization (WHO) End TB Strategy and eliminate TB in England by 2035. Earlier detection and treatment of TB increases likelihood of recovery and reduces chances of onward spread of disease. Bristol City Council remain engaged with the South West TB network, and inputting into the delivery of the action plan locally.

2.1 Incidence

In Bristol, the average annual number of cases now stands at 47 (10.1 per 100,000 population). Source: Tuberculosis in England: 2021 report (presenting data to end of 2020). This is a reduction from 11.5 between 2017/19 and 15.1 in 2015/17 (See **Fig. 2.1**)

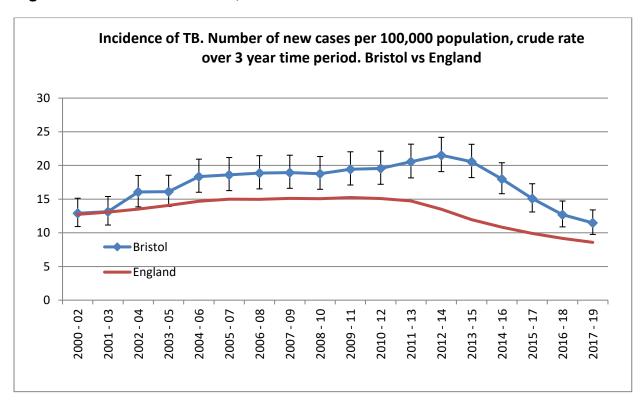


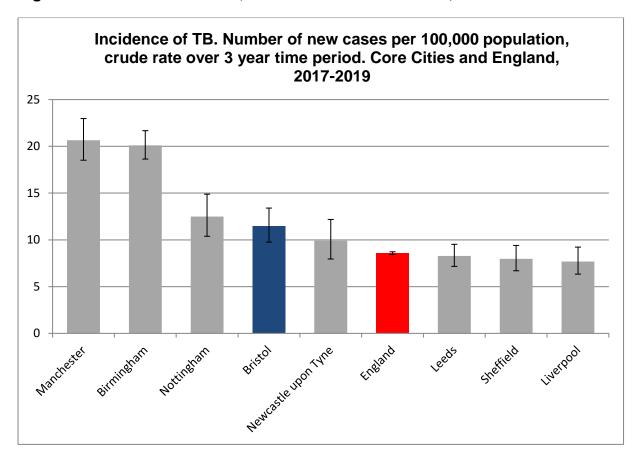
Fig 2.1.1: TB Incidence Rates, 2000/02-2017/19

Source: Public Health Outcomes Framework September 2021

Compared to other cities, Bristol is 4th highest of English Core Cities, and 6th highest of "Chartered Institute of Public Finance (CIPFA) Nearest Neighbours" (See Fig. 2.1.2 and 2.1.3.)

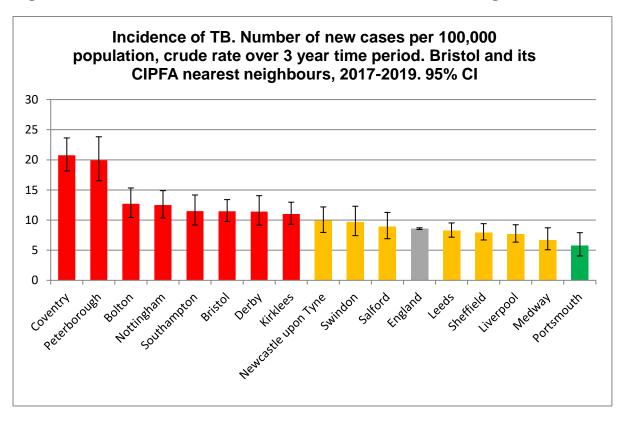
Red bars indicate rates statistically significantly higher than England average; amber bars indicate rates statistically similar and green bars – rates statistically significantly lower than England average

Fig 2.1.2: TB Incidence Rates, 2017 - 2019 for Core Cities;



Source: Public Health Outcomes Framework September 2021

Fig 2.1.3: TB Incidence Rates, 2017-2019 for CIPFA Nearest Neighbours



2.2 Equalities data

The Public Health England 'Tuberculosis in the South West: 2020' 2 report provides data on health inequalities within the South West region. Most TB cases in 2019 were of White ethnicity (48.5%), the next most common ethnicities were Mixed-Other (14.9%), Black-African (12.8%) and Indian (11.9%). The proportion of cases in the Mixed-Other population increased in 2019 compared to 2018.

The largest proportion of cases (21.4%) lived in the most deprived areas of the region (the most deprived IMD2019 decile). The Public Health England's 'Tuberculosis in England 2020 report' 3 presents the TB notification rates per 100,000 population for the year 2019 by deprivation decile (IMD 2019) (See Fig. 2.2.1). The rate of TB increases with increasing levels of deprivation: 18.4 per 100,000 in the 10% of the population living in the most deprived areas compared with only 3.6 per 100,000 in the 10% of the population living in the least deprived areas.

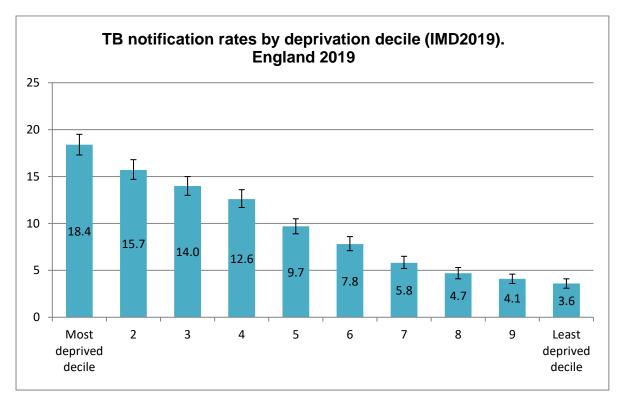


Fig 2.2.1: TB Notification Rates by Deprivation, England 2019

Source: Public Health England's 'Tuberculosis in England 2020 report'.

2.3 Collaborative TB Strategy for England, 2015 to 2020 End of programme report

This End of Programme report for the Collaborative TB Strategy for England, **2015 to 2020** was written by the National TB Strategy team with support from NHS England and NHS Improvement, regional TB Control Boards and in consultation with a broad range of stakeholders.

The TB strategy (2015-2020) was implemented to look at using the assets that already exist in the NHS and the public health system to:

- support and strengthen local services in dealing with TB (particularly in areas of high incidence)
- ensure clear lines of accountability and responsibility
- provide national support for local action

During the 5 years of the 2015 to 2020 strategy, TB incidence in England declined by 29% – from 11.9 per 100,000 in 2014 (pre-strategy) to 8.4 per 100,000 in 2019. A robust national TB programme structure with multi-disciplinary and multi-agency involvement was created to deliver the strategy, implementing a range of innovations. (Source: TB strategy for England, 2015 to 2020 end of programme report).

2.4 TB Quarterly Reports

Provisional data (England) for 2020 (and thus should be interpreted with caution as final culture confirmation is not available) shows a decline in TB case notifications and rates compared to 2019. A total of 4,131 TB cases were notified in 2020, a rate of 7.3 per 100,000. This represents a 13.1% decline in TB rates since 2019, and a 38.7% decline since the start of the TB Strategy in 2015. It is important to note that this data is provisional and may represent under reporting due to the COVID-19 pandemic. Further details of provisional data are published on the TB pages of the PHE website in quarterly TB reports. These reports aim to provide timely and up-to-date figures on key epidemiological indicators, inclusive of regional breakdowns, to inform ongoing TB control efforts in England.

2.5 TB Action Plan for England 2021

We are now moving into a new era of TB control placing a greater focus on supporting the NHS and recovery from COVID-19 and we have a new TB Action Plan to guide this work. With this new focus, TB strategic work will become business as usual within PHEs TB Unit, and the small national TB strategy team is being disbanded.

The aim of the TB Action Plan is to improve the prevention, detection, and control of TB in England. The Action Plan will focus on the needs of those affected by TB and TB services whilst recognising the impact and learning of the COVID-19 pandemic.

The five key priorities of the action plan are:

- Priority 1 Recovery from COVID-19
- Priority 2 Prevent TB Priority
- Priority 3 Detect TB
- Priority 4 Control TB disease
- Priority 5 Workforce

These priorities are underpinned by:

- actions for specific population groups i.e., under-served populations, new entrants, people with drug resistant TB and children with TB
- measurable outcomes and indicators
- systems wide actions i.e., communications, surveillance, research and ensuring TB is included on prevention and health inequalities agendas.
 Delivery of the priorities will build on the progress in collaborative working particularly at regional and local level, to strengthen the patient pathway from the onset of symptoms or detection of infection and to utilise the latest technology, treatment, and diagnostics.

Delivery of the priorities will build on the progress in collaborative working particularly at regional and local level, to strengthen the patient pathway from the onset of symptoms or detection of infection and to utilise the latest technology, treatment, and diagnostics.

Bristol City Council Public Health Team alongside multi-agency partners remain engaged with the South West TB network, and inputting into the delivery of the action plan locally.

2.6 Further data / links:

Public Health England. (2021) Tuberculosis in the South West 2020:
 Presenting data to end of 2019. Public Health England: South West.
 https://www.gov.uk/government/publications/tuberculosis-tb-regional-reports

- Public Health England's 'Tuberculosis in England 2020 report',
 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/
 attachment_data/file/943356/TB_Annual_Report_2020.pdf
- TB Action Plan for England (2021)

Tuberculosis (TB): action plan for England - GOV.UK (www.gov.uk)

- Public Health Outcomes Framework https://fingertips.phe.org.uk/profile/publichealth-outcomes-framework
- Collaborative TB Strategy for England, 2015 to 2020 End of programme report

Collaborative TB Strategy for England, 2015 to 2020: end of programme report (publishing.service.gov.uk)

Tuberculosis in England: National Quarterly Reports.

Tuberculosis in England: national quarterly report, Q1 2021, 1 January to 31 March 2021 (publishing.service.gov.uk)

Tuberculosis in England National quarterly report: Q4 2020 1 October to 31 December 2020

Tuberculosis in England National quarterly report: Q3 2020 1 July to 30 September 2020

Tuberculosis in England National quarterly report: Q2 2020 1 April to 30 June 2020

3. Infection Prevention and Control (IPC) – Health Care Acquired Infections (HCAI's)

Bristol, North Somerset and South Gloucestershire (BNSSG) Clinical Commissioning Group (CCG) hosts the Bristol, North Somerset and South Gloucestershire wide Healthcare Associated Infection (HCAI) Group which is held quarterly and chaired by the CCG's Deputy Director of Nursing & Quality. The group met quarterly during the reporting period, maintaining oversight, and supporting joint action where needed.

During 2020/21, the BNSSG Antimicrobial Resistance Strategy (AMR) Group was established. The purpose of the group is to support and enable delivery of the UK 5-year AMR National Action plan 2019-24 across BNSSG and ensure progress towards the 20-year vision to contain and control AMR. The group provides leadership for a system-wide approach for the containment and control of AMR in human health services. Bristol City Council Public Health Team have representatives at both groups.

HCAI Highlights from this reporting year were:

Title	Aims 20/21	Performance	Future Actions
Methicillin Resistant Staphylococcus Aureus (MRSA)	Systems working approach to reducing cases. Zero tolerance for MRSA.	A 25% reduction in MRSA cases is reported	Continue with systems working approach and plan to launch the Chlorhexidine pilot in quarter one 2021/22.
Escherichia coli (E. coli)	Monitoring of cases and systems approach to reducing cases.	A reduction in case assignment of 12% is noted	An improvement plan for 2021/22 will be developed, following review of previous local initiatives.
Other Bloodstream Infections (BSI's)	A reduction in the number of gram-negative blood stream infections across the whole health economy, noting the national ambition reduction target.	A reported reduction of 8% in MSSA cases. No significant change is reported in CCG assigned Klebsiella and Pseudomonas cases.	Continued monitoring for Klebsiella Pseudomonas and MSSA bacteraemia.
Clostridioides difficile Infection CDI	To remain below the threshold of not more than 201 BNSSG CCG	There has been a significant increase in assigned CDI	The CCG will actively contribute to the NHS England CDI

	assigned cases set by NHS England (NHSE) for Clostridioides difficile Infection.	cases is reported during 2020/21. A local action plan has been developed to ensure that local processes are aligned with best practice.	collaborative process in July 2021.
Serious Incidents (SI's)		94 HCAI COVID- 19 related incidents have been received by the CCG.	The CCG will schedule a review process to identify learning and associated actions to mitigate risk.
Antibiotics Prescribing	Monitoring of antibiotic consumption and prescribing has continued. The aim was a reduction in antibiotic prescribing, noting the national requirements.	Three key areas of work have been agreed by the BNSSG Antimicrobial stewardship group including CDI.	The new diagnostics subgroup of the AMR Strategy Group is focussing on urinary tract infections.
Seasonal Influenza Vaccination Rates for Frontline staff	National targets for Seasonal Influenza vaccine for Frontline Staff.	An overall improvement in uptake is noted.	Continued monitoring.

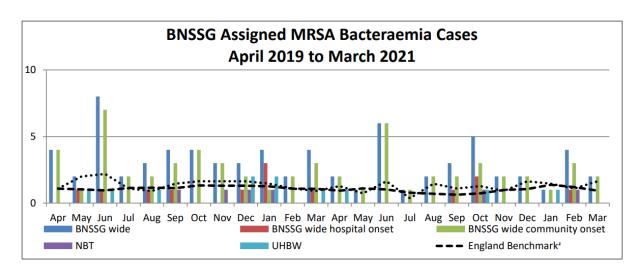
3.1 MRSA Methicillin Resistant Staphylococcus Aureus (MRSA) Bacteraemia (Bloodstream Infections).

Methicillin-Resistant Staphylococcus Aureus (MRSA) is a gram-positive bacterium that commonly colonised in the human skin and mucosa without causing infection. When infection occurs, usually because the bacterium enters the body via broken skin or medical procedures it can produce a wide variety of disease; minor skin and wound infections, pneumonia, life-threatening blood stream infections (septicaemia) and sepsis.

Nationally, there is a 'Zero Tolerance' approach to MRSA Bacteraemia and whilst the number of cases assigned to BNSSG CCG has improved significantly during 2020/21, the local system remains challenged by the number of cases assigned. During 2020/21, 31 cases were assigned to BNSSG CCG, representing a year-on-

year reduction for the last four years, a 36% reduction from the 2017/18 position when 49 cases were assigned and a 25% reduction when compared to 2019/20. The majority of cases continue to occur in the Bristol area and account for 80%+ cases in the year 2020/21. Over the last three years we have seen a reduction in the Bristol assigned cases: 2018/19 = 30, 2019/20 = 27 and 2020/21 = 25 but we remain an outlier. As a CCG, this benchmark is above the all England and Southwest average per 100,000 populations. Fig. 3.1.1 shows the distribution of cases from month to month, with the highest number of cases arising in June 2019, June 2020, and October 2020.

3.1.1 BNSSG Assigned MRSA Bacteraemia Cases from April 2019 to March 2021.



New assigned cases are predominately related to community onset (87%) with the remainder (13%) relating to hospital onset. Of these 87% community onset cases, 38% (10 cases in Bristol) related to Persons Who Inject Drugs (PWID). A Post Infection Review (PIR) process is undertaken for each case irrespective of onset. There is ongoing multiagency work through the Design Council Project to develop and implement harm reduction / risk management in this group. In addition, the Reducing Bacterial Infections (REACT) project is continuing to work with system partners including Bristol City Council, BNSSG CCG, Bristol University, Bristol Drugs Project, and Public Health England to develop a range of interventions to optimise harm reduction amongst PWID.

3.2 Clostridium Difficile

Clostridium Difficile (C Diff) is an anaerobic spore-forming gram positive, toxin producing bacterium. It is more common in elderly, hospitalised patients, especially those with current or recent history repeat or extended courses of antibiotics. C Diff can lead to severe illness and mortality but is preventable through antibiotic

stewardship, high levels of environmental cleaning in addition to standard infection prevention and control measures by staff.

During 2018/19 and 2019/20, C Diff cases assigned to BNSSG CCG were static at 196 and 195 respectively, remaining under the system threshold of 309 and 201 cases set by NHS England. During 2020/21 formal system thresholds were not announced.

Many systems, including Bristol, have reported an increase in assigned C Diff cases and BNSSG has seen an increase of 50%. In Bristol, our cases have also seen a significant rise with 2019/19 = 82, 2019/20 = 74 and 2020/21 = 117. In response to the increase in C Diff cases, NHS England have announced that a South West C Diff collaborative group will be convened in July 2021 and BNSSG CCG colleagues will be actively engaged with this process.

Local processes for reviewing hospital onset cases are robust, with all cases receiving a Consultant Microbiologist review to identify prescribed antibiotics, which are then reviewed against the local guidance/formulary. Due to the redeployment of staff during the COVID-19 pandemic, review meetings were suspended and case reviews by the CCG remain outstanding, however case reviews by the provider and Consultant Microbiology staff have continued throughout 2020/21. At the March 2021 HCAI Group, BNSSG signalled an intention to undertake a rapid review exercise of all 2020/21 cases and this approach was discussed with NHS England.

A rapid 'Deep Dive' of all CCG cases assigned in June 2020 was undertaken with the intention of identifying and exploring the factors that could be driving this increase and potential areas for improvement and to develop recommendations to mitigate risk.

The following areas were identified as requiring further focus to ensure that processes are aligned with best practice and identified actions were presented to the BNSSG CCG Quality Committee and Primary Care Oversight Group (PCOG): Guidance on Resampling, Antibiotic Usage, Penicillin Allergies, Documentation/Alerts and Practice Based Care Reviews.

3.3 E.coli

As a system there were a number of initiatives adopted in 2019/20 to support a reduction in cases including the introduction of catheter passports and a range of projects with a focus on patient hydration. BNSSG CCG has noted that during 2019/20, there was a 6% reduction in E. coli bacteraemia cases noted when compared with 2018/19 and a further reduction of 12% has been achieved when comparing 2019/20 with 2020/21. BNSSG CCG assigned cases, has reduced from 662 to 585 cases. More specifically in Bristol, cases have been reducing since 2018/19 with 344 cases, 2019/20 with 297 cases and in 2020/21 with 281 cases.

Case activity is generally below the Southwest benchmark and at, or below, the all-England benchmark. Work will continue to ensure that previous quality initiatives have been embedded.

3.4 Other Blood Stream Infections (BSI's)

During 2020/21, monitoring of monthly case totals assigned to BNSSG CCG for MSSA, Klebsiella and Pseudomonas aeruginosa bacteraemia continued. During 2020/21, no formal cohort reviews have been undertaken, however case assignment remains under the Southwest and all England benchmarking. In Bristol, we have seen an increase in Pseudomonas aeruginosa bacteraemia cases since 2018/19 with 23 cases, 2019/20 with 25 cases and 2020/21 with 33 cases identified.

Pseudomonas aeruginosa bacteraemia cases when compared to 2019/20 are static and case activity remains below an average of ten each month. The national dataset has previously indicated that urinary tract infections are reported as the primary source (where a source is identified) and BNSSG will seek to undertake a local cohort review during 2021/22 to capture local drivers and check for recurring patients.

Regarding Klebsiella bacteraemia cases, when compared to 2019/20 there has been an approximate 5% increase from 75 cases in 2019/20 to 85 2020/21 and compared to 77 cases in 2018/19. Case activity is the second lowest, when compared with the seven CCGs across the Southwest.

An 8% reduction in MSSA bacteraemia cases is noted when compared to 2019/20, from 189 to 172 cases and case activity for BNSSG is the 2nd lowest when compared with the seven CCGs across the southwest for 2020/21. Initial discussion with system partners indicates that PWID are likely to be a recurring theme within this dataset; options for additional support with PHE (UKHSA) to investigate this further will be explored. Specifically, in Bristol, we have seen a reduction in cases since 2018/19 with 103 cases, 2019/20 with 90 cases and 2020/21 with 78 cases.

3.5 Seasonal Influenza Vaccination Rates for Frontline staff

During 2020/21, BNSSG system wide flu groups were established with membership from all stakeholders and contracted providers, with clear governance arrangements. All providers submitted action plans to the CCG for review and assurance. The national target sought to provide an offer of seasonal flu vaccinations to all frontline staff. The deployment of staff to the national seasonal campaign occurred during the additional pressures associated with COVID-19.

Seasonal Flu Vaccination Uptake Rates for Frontline Healthcare Workers - 2019/20 and 2020/21

Contracted Provider	2019/20 Uptake Rate	2020/21 Uptake Rate	Change
University Hospitals	UHB - 84.7%	86.4%	Improvement
Bristol and Weston	WAHT - 84%		
(UHBW)			
Sirona Care and	BCH - 74%		Improvement
Health	Sirona – 58.8%	86%	
	NSCP - 83.2%		
Avon and Wiltshire	55%	71%	Improvement
Mental Health			
Partnership			
North Bristol Trust	82%	65%	Reduction

An improvement in uptake is noted amongst most providers. NBT reported a reduction in uptake, which may have been affected by the diversion of resources to the COVID-19 vaccination programme.

4. Antimicrobial Resistance (AMR)

Bacteria, viruses, and fungi are naturally adapting and becoming resistant to medicines used to treat infections that they cause. Coupled to this, the development pipeline for new antibiotics is at an all-time low. Together this means society is rapidly getting close to a point where we may not be able to prevent or treat everyday infections or diseases. Antibiotic prescribing and antibiotic resistance are inextricably linked, as overuse and incorrect use of antibiotics are major drivers of resistance (PHE, 2018).

A Bristol, North Somerset, and South Gloucestershire (BNSSG) health system Antimicrobial Resistance Strategy group has been established with a remit to implement AMR 5-year plan. The BNSSG antimicrobial stewardship collaboration and Healthcare Acquired Infections group report to the strategy group.

4.1 Antibiotic prescribing

The COVID-19 pandemic led to an overall reduction in antibiotic prescribing during 2020-21. This has mostly been driven by a reduction in prescribing for upper respiratory tract infections, especially in children, with significant reductions in prescribing of amoxicillin and phenoxymethylpenicillin. However, there has been an increase in broad spectrum antibiotic prescribing.

Support was given to practices by the CCG medicines optimisation team in the form of teaching sessions and time with practice pharmacists. This supported 38 out of 43 Bristol practices to meet the both the prescribing targets of overall prescribing 0.965 antibiotics/STAR-PU and less than 10% of antibiotics prescribed being broad spectrum, cephalosporins, quinolones and co-amoxiclav. This work will continue with practices that remain above the prescribing targets.

5. Sexual Health

Efforts to improve the sexual health of the population are a public health priority. Sexually transmitted infections (STIs) can have lasting long-term and costly complications such as pelvic inflammatory disease, ectopic pregnancy and infertility if not treated and are entirely preventable.

Bristol has a relatively young population compared to England and this is predicted to rise. The city is ethnically diverse and has areas of high deprivation. There is an active lesbian, gay, bisexual and trans scene. These factors mean sexual health is a high priority for Bristol.

Successes and Challenges of 2020/21

5.1 COVID-19

Our specialist sexual health service, Unity rapidly adapted their service delivery model in response to COVID-19 in 2020. To reduce face to face time the service moved to telephone triage, postal kits for self-sampling, in house rapid STI testing and providing medication via post. Those who needed to be seen in person (including the most vulnerable) were still seen face to face although community venues were closed. Whilst these changes were a challenge to implement, many of the adaptions have been positive and are likely to be adopted when the pandemic is over.

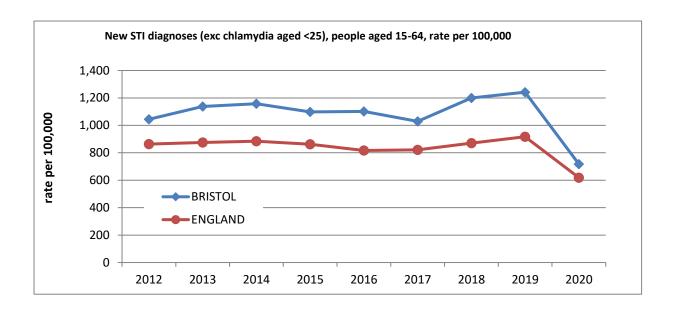
5.2 Sexually Transmitted Infections (STIs)

Bristol has the highest crude rates of STIs in the south west and significantly higher rates than England. When age is taken into account, Bristol's overall rates appear similar to England's but Bristol's rate amongst females remains significantly higher.

A significant drop in STI diagnoses was recorded for 2020 (See **Fig. 5.2.1**). This reduction was seen nationally and was most likely due to the impact that COVID-19 had on both social interactions and restricted access to sexual health services and testing during this period. In Bristol the rate of new STI diagnoses was 717.9 per 100,000 population aged 15-64 (this data excludes chlamydia in under 25-year-olds¹). This was 43.7% lower than in 2019, but still significantly higher than the national average (619 per 100,000, a decrease of 32.5% since 2019).

¹ Chlamydia data for 15 – 24 year olds can be accessed in the Bristol JSNA Health Profile: https://www.bristol.gov.uk/documents/20182/3849453/JSNA+2019+-+Chlamydia+%28updated+Oct+2019%29.pdf/22fe3162-74d5-d948-8d55-7c93860274ee

Fig. 5.2.1 New STI diagnoses (exc chlamydia aged <25) crude rate per 100,000 population aged 15-64, PHE Sexual and Reproductive Health Profiles, October 2021



There have been issues with local sexual health data quality, but more detailed analysis suggests the greatest reduction in STI rates was around April/May 2020 as COVID-19 restrictions took hold, and that rates started to recover from June 2020.

Despite the reduction in other STIs for 20/21, a specific concern is the ongoing increase in syphilis cases. There were 83 cases of syphilis in Bristol in 2020. This gives a rate of 17.8 per 100,000, which is significantly higher than England's rate and more than double the 2016 rate (See **Fig. 5.2.1**). Although absolute numbers are relatively low in comparison to other STIs, syphilis can cause very serious long-term problems if left untreated.

Data quality issues are being resolved and will enable better local understanding of STIs and inequalities between groups within Bristol enabling more effective targeting of health promotion messages and services.

Syphilis diagnostic rate per 100,000 population ate per 100,000 BRISTOL **ENGLAND**

Fig. 5.2.1 Syphilis diagnostic crude rate per 100,000 population, PHE Sexual and Reproductive Health Profiles, October 2021

5.3 Rapid STI Testing

Unity Sexual Health Service introduced a 'rapid result pathway' expanding the use of Panther, an STI diagnostic machine situated in their Central Health Clinic. Previously samples were sent to the laboratory at Southmead Hospital whereas Panther allows in house testing for chlamydia and gonorrhoea. Results are available in four hours as opposed to two to three weeks enabling earlier treatment for patients. This also reduces unnecessary use of antibiotics and the potential for antimicrobial resistance.

5.4 Swab Shortages

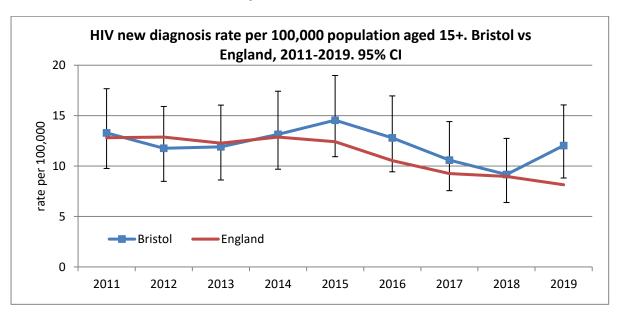
In October 2020, there was a shortage of Hologic Aptima NAATs (nucleic acid amplification tests) which test for gonorrhoea and chlamydia which particularly impacted Unity Sexual Health as well as other areas of the country. This was likely owing to factors related to COVID-19 and BREXIT. As a result of this shortage Unity developed a plan to ration tests for service users presenting to the service who were at a higher risk of STIs. They also suspended their online testing service during this month. The supply issues have since been resolved but Unity now have contingency plans in place.

5.5 High rates of HIV

The 2019² Bristol rate of new diagnoses of HIV was 12 per 100,000 population (aged 15 and over), statistically significantly higher than the national average (8.1 per 100,000). In 2019 there were 46 people aged 15+ newly diagnosed with HIV in Bristol. This rate is the 34th highest (out of 150 UTLAs/UAs) across England. The HIV new diagnosis rate is higher amongst residents of more deprived areas.³

The percentage of people in Bristol newly diagnosed with HIV from 2017-19 who started antiretroviral therapy (ART) promptly (within 91 days of their diagnosis) was 77.3%, which is similar to the national percentage (80.5%).⁴

Fig. 5.5.1 HIV new diagnosis rate per 100,000 population aged 15 and over; Source: via PHE Sexual and Reproductive Health Profiles December 2020



In Bristol it is estimated that we have around 7% of people who are unaware of their HIV diagnosis⁵. This increases the risk of poor health outcomes and the risk of onward transmission of HIV. HIV surveillance data shows that, of the people with a new HIV diagnosis in Bristol in 2017-19, almost 40% % are considered to have had a late diagnosis.⁶ Heterosexuals, Black African, Black Other and Asian ethnicities are at a higher risk of late diagnosis in England.

Fig. 5.5.2 HIV late diagnosis percentage; Source: via PHE Sexual and Reproductive Health Profiles Dec. 2020

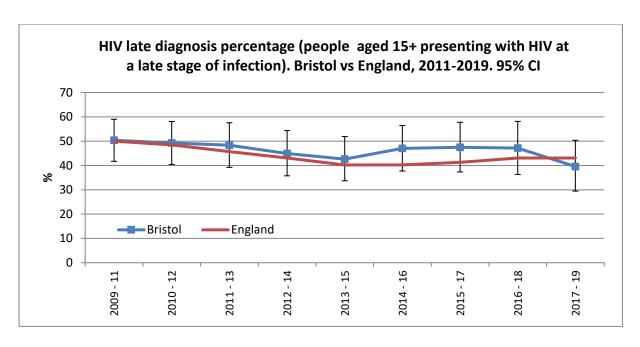
² Please note that HIV data for 2020 was not available at time of publication. Therefore the 2019 data used here does not factor in the implications of COVID-19 on HIV prevalence, testing or late diagnosis.

³ Public Health England(2020), Sexual and Reproductive Health Profiles, 2020

⁴ Public Health England(2020), Sexual and Reproductive Health Profiles, 2020

⁵ Public Health England (2019) Summary profile of local authority sexual health Bristol

⁶ Public Health England(2020), Sexual and Reproductive Health Profiles, 2020



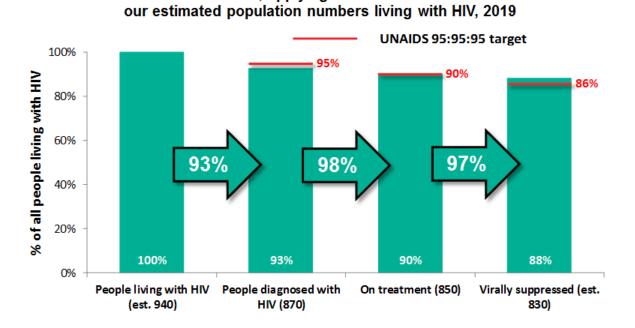
5.6 Fast Track Cities

Bristol signed up to be a Fast Track City in 2019. Fast Track Cities is about bringing city partners and the public together to accelerate work towards ending HIV by 2030. In order to achieve the Fast Track Cities targets (95% of people living with HIV knowing their status, 95% of people with diagnosed HIV on treatment, 95% of people on treatment with suppressed viral loads). Applying Bristol's current Fast Track Cities performance to people who are diagnosed with HIV in Bristol (n=870) illustrates how we are performing against these targets (2020 data not yet available).

The Fast Track Cities Steering Group developed three workstreams in 2020: Increasing HIV Testing, Reducing HIV Stigma and HIV Systems Leadership. Among others a number of actions were completed from these workstreams such as running a U=U (undetectable = untransmissible) campaign, producing a Fast Track Cities website and feeding into the development of an HIV PrEP service (see Fig **5.6.1**).

Fig 5.6.1 Bristol HIV Fast Track City Continuum of HIV Care Performance; Source: BCC Public Health

Continuum of HIV care; applying Bristol's 93:98:97 statistics to



5.7 HIV testing

In 2019, the percentage of people of Bristol who attended a sexual health service and received an HIV test was 69.9%. Normalising HIV testing is essential for reducing stigma and reducing late diagnosis and needs to be encouraged. Although Bristol has high rates of HIV, we are not routinely testing people in settings such as the Emergency department

5.8 HIV Pre Exposure Prophylaxis (PrEP)

PrEP became available via routinely commissioned NHS sexual health services at the end of 2020. This medication reduces the risk of individuals acquiring HIV. Bristol, North Somerset, and South Gloucestershire were commended in the national press for being one of the first areas in the country to make this provision available via Unity. There has been good uptake of this provision throughout 2020/21 and more work is now being done to improve access to populations at higher risk of HIV who historically don't access sexual health services.

5.9 Common Ambition Bristol

Bristol Fast Track Cities has a particular focus on addressing HIV amongst the Black African and Caribbean communities and in 2020 partners were awarded a £500k grant from The Health Foundation. This 3-year project is called Common Ambition Bristol and launched in February 2021. African and Caribbean community members

are working with healthcare professionals and academics in Bristol to introduce ways to increase the uptake of HIV testing and broader sexual health services. They also aim to reduce late HIV diagnosis and stigma in these communities.

5.10 Relationships and Sexual Health Education

Relationships, Sex and Health Education became statutory schools in 2020. The Bristol Primary Teaching School Alliance and the Cabot Learning Federation (CLF) Institute in conjunction with Bristol City Council were commissioned by the Department for Education (DfE) to develop the south west RSHE Hub- training to support schools in preparing for the statutory changes to the curriculum. This comprised a 'train the trainer' and peer support model and used using brand new DfE materials. This enabled RSHE leads to audit their current provision and to support colleagues, allowing them to train their own staff with a package of presentation materials and resources. Additional sessions were also delivered on specific areas of RHSE such as a session delivered in partnership with Terrence Higgins Trust on HIV and STIs including tackling HIV stigma.

69% of Bristol primary and secondary schools have a teacher who has attended a minimum of one session with the South West RSHE hub.

5.11 SHIP HIT

The Sexual Health Improvement Health Integration Team (SHIP HIT) is a group of partners aim is to support the development of evidence-based services to improve the sexual health of our population. Achievements of the SHI PHIT in 2020 included supporting the Common Ambition bid, undertaking an evaluation of same day STI testing at Unity's central clinic and evaluating commercial online STI testing which has led to a national position statement being issues by the British Association for Sexual Health ad HIV (BASHH).

Future Plans

5.12 Chlamydia Screening Changes

A change to the national chlamydia screening programme was published by PHE in 2021. The programme is changing focus to reduce reproductive harm of untreated chlamydia infection in young women only. This change removes the offer of opportunistic chlamydia screening to asymptomatic young men. All young people (male and female) will still be able to access chlamydia tests at Unity and young men will continue to be contacted and tested through partner notification procedures. Unity will be working with Public Health in 21/22 to introduce these changes with an anticipated start date of April 2022

5.13 Partner Notification in primary care

Currently if a patient is tested for an STI in primary care and the results are positive, the GP will provide treatment for the patient, but sexual contacts of the patient are not systematically contacted and tested and treated. Local research was undertaken to explore whether telephone follow up of contacts by the sexual health service Unity was acceptable and feasible. The results from this were positive and SHIP HIT partners are currently developing a larger pilot to ensure this can be rolled out across Bristol and surrounding local authorities.

5.14 Expanding Access to PrEP

Uptake of the new HIV PrEP service at Unity has been encouraging amongst men who have sex with men in 2020/21. In 2021/22 the service will be focusing on improving uptake among other populations at risk of acquiring HIV (e.g., Black African people) who have not been accessing this provision. This will involve running a dedicated health promotion campaign targeting certain groups via social media, delivering education sessions to primary care partners to raise awareness of PrEP, and working in partnership with Common Ambition Bristol to reduce HIV stigma.

5.15 Fast Track Cities

Going into its 3rd year of Bristol being a Fast Track City the partnership will continue to target improving HIV testing, tackling HIV stigma and providing system leadership around HIV. Plans for 2021/22 include delivering a pilot with pharmacies in high prevalence areas to deliver point of care HIV testing, scope HIV testing in Emergency Department in Bristol and install, exploring feasibility of delivering PreP treatment though community pharmacies and evaluating HIV test vending machines across Bristol. Fast Track Cities will also continue to support related HIV projects such as Common Ambition Bristol.

5.16 Sexual Health Promotion

Unity via its Health Promotion partner Terrence Higgins Trust are planning a number of different Health Promotion campaigns in 2021/22. These include raising awareness of the Unity brand, highlighting the changes to the chlamydia screening, and increasing PrEP provision in under-served populations. Unity will continue to raise awareness around HIV during national HIV testing week and on World Aids Day.

6. Environmental Health, Public Protection Work

6.1 Foodborne Illness

Foodborne illness (more commonly referred to as food poisoning) is any illness that results from eating contaminated food. Foodborne illness can originate from a variety of different foods and be caused by many different pathogenic organisms at some point in the food chain, between farm and fork. Although most cases in the UK are mild, they are unpleasant, result in absences from education or the workplace and place a significant demand on healthcare services. Occasionally foodborne illness can lead to complications or even death.

Access to safe food and water is one of the most fundamental human needs. Figures from the Food Standards Agency state that there are over 500,000 cases of food poisoning per year across the UK from identified causes and if the unidentified causes were to be included this figure would more than double. In Bristol, there were 509 confirmed cases of notifiable infection reported to Bristol Public Protection between April 2020 and March 2021 with the highest reports seen in July and September (see **Fig 6.1.1**). This is a reduction in cases from last year as in 2019/2020, there were 715 confirmed cases of gastrointestinal infection between April 2019 and March 2020. BCC Public Protection Team works closely with relevant health protection agencies and businesses to minimise spread and to investigate serious cases and outbreaks throughout the year. **Fig 6.1.2** shows the breakdown of service requests by month with the highest number of requests being processed in October and November 2020.

Source: UK Health Security Agency was Public Health England Notifications recorded on Civica.

Fig 6.1.1: Confirmed cases of gastrointestinal infection notified to Bristol City Council Environmental Health of residents of Bristol local authority, April 2020 to March 2021

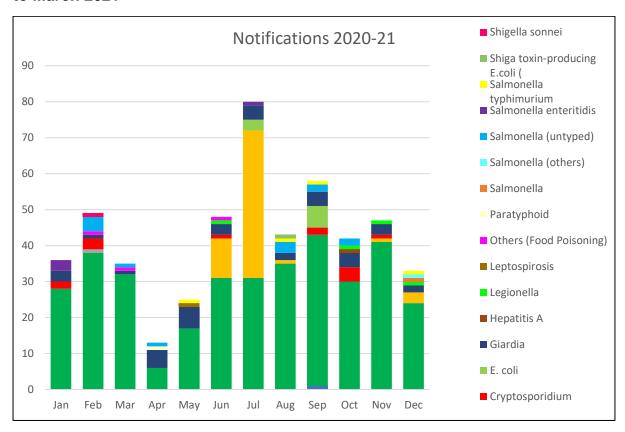
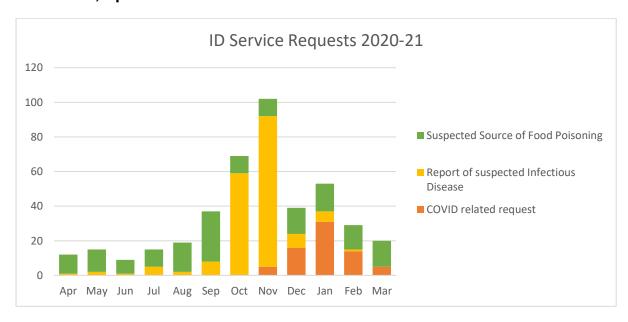


Fig 6.1.2: Infectious Disease (ID) Service Requests completed by Public Protection, April 2020 to March 2021



6.2 Food Safety Inspections and Interventions

All food businesses based in the UK are subject to food hygiene laws enforced by local authorities. Businesses can be inspected at any point, e.g., if we have complaints to as part of the annual programme of inspections.

Authorised environmental health officers (EHOs) have the right to enter and inspect any premises without appointment or approval to ensure that businesses meet the requirements of the <u>Food Standards Agency</u> (FSA). Inspections utilise the FSA's '<u>Food Hygiene Rating Scheme</u>', awarding businesses a 'rating 'upon completion of the examination. These ratings run from 0-5 stars, with a score of '0' indicating that serious action must be taken immediately to avoid penalties or the closure of your premises.

The Food Standards Agency requires Bristol City Council to achieve 100% of food safety inspections annually. Bristol City Council has agreed to try and achieve 80% of the required target.

There is an annual programme of inspections and due to the pandemic and restrictions on premises operating we were unable to carry out all the statutory food inspections as would normally have planned for 2020-2021. At the end of 2019-2020 we had achieved approx. 79% of the required inspections/interventions, this was impacted in March 2020 due to the start of COVID-19.

During 2020-21 we followed FSA guidance and priority planning to focus on highest risk inspection, with many businesses having to close due to national restrictions, this severely impacted on our ability to visit and for them to operate. In 2020-2021 Officers were diverted to enforcement activities relating to COVID-19. This resulted in a backlog of inspections of approximately 3,000, including over approx. 1,000 unrated/uninspected businesses.

As a result, we have secured additional funding to employ contractor EHOs following increasing their rates, there has been a very high national demand and we envisage they will complete 1500-2000 inspections in 2021-2022. We have also secured some limited funding form the FSA to identify unrated inspections and undertake a survey to enable us to identify premises still operating and for targeting for an inspection/intervention.

This remains a serious risk to Public Health as the backlog is significant, but we will aim to reduce this by the end of March 2022. We have reported the issues to the FSA as part of their regular monitoring of LA activity and via corporate spar net performance reporting.

Additionally, when opportunities for increased funding become available, we will apply.

6.3 Port Health Work

Bristol Port Health Authority (BPHA) is part of BCCs Public Protection team and covers the ports of Avonmouth and Royal Portbury Docks which is in North Somerset, for the purposes of the Bristol Port Order, BCC is the statutory Port Health Authority for both.

The BPHA is responsible for operating the international Border Control Point (BCP) based at Avonmouth which has been operational for many years as a designated low throughput BCP. The Bristol Port Health Authority jurisdiction as Food Authority also extends to Royal Portbury Docks in North Somerset District. Due to UK Exit from the EU and expected increase in imported food controls, a new much larger BCP was planned in Autumn 2020 at Royal Portbury Dock where the deep-water dock is located. The new facility will be able to handle the full range of imported Products of Animal Origin and High-Risk Foods Not of Animal Origin BCP facilities are owned by BPC but staffed, managed, and equipped by Bristol City Council as the Port Health Authority. This new facility has cost several million pounds funded by central Government and the Bristol Port Company.

Bristol Port Health Authority has worked with Bristol Port Company on the new BCP from the start of the planning stage in October 2020 and ongoing though the rest of the year. Port Health have liaised with their partner organisations such as Border Force, the Animal and Plant Health Agency, Department for Environment Food & Rural Affairs, Food Standards Agency, The Cabinet Office etc. on relevant details of the BCP requirements.

Bristol Port comprises Avonmouth and Royal Portbury Docks which are major seaports in the UK. They have good facilities and have the potential to increase imported food trade significantly in the coming years.

The port health authority is proactive in ensuring covid secure controls have been in place in relation to all ships arriving from international and European destinations. A 24 hrs service was introduced at the beginning of the COVID-19 pandemic to provide effective covid controls at the port. Our Port Health Officers liaised with many different partners about the changing UK legal covid requirements over the year. These partners included Bristol Port Company, Importers, Border Force, Public Health England/UK Health Security Agency, and seafarers' services. This has involved working on complex COVID-19 cases arriving from various countries and working with relevant agencies to ensure COVID-19 spread is contained, crew and the public have been protected and crew changes and self-isolation requirements adhered too.

Other Port Health work included inspections/sampling of ships including cargo and cruise liners for non-covid infection control measures. e.g., Legionella, food poisoning, communicable diseases, and hygiene arrangements. Issuing of International Ships Sanitation Certificates. See Fig 6.3.1 for the spread of Port Sampling carried out between April 2020 and March 2021. The highest recorded sampling activities were performed in November 2020 and March 2021. Fig 6.3.2 shows the spread variety of Port Health inspections carried out during this reporting period with the highest recorded activities completed in May, July, August, and September 2020. Fig 6.3.3

shows a steady record of manifest checks and checks on Maritime Declarations of Health from month to month during this reporting period. Fig 6.3.4 shows that in November 2020, the greatest number of checks on imports and enforcement action was taken. The rate and number of actions completed by Port Health officers during this reporting period was impacted by the working restrictions in place due to the COVID-19 pandemic.

Fig 6.3.1: Port Sampling completed by Port Health, April 2020 to March 2021

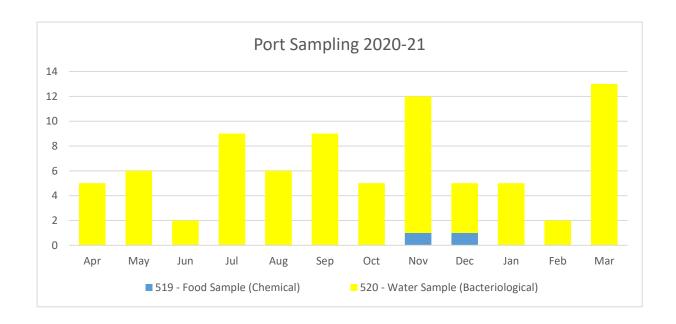


Fig 6.3.2: Ship Inspections completed by Port Health, April 2020 to March 2021

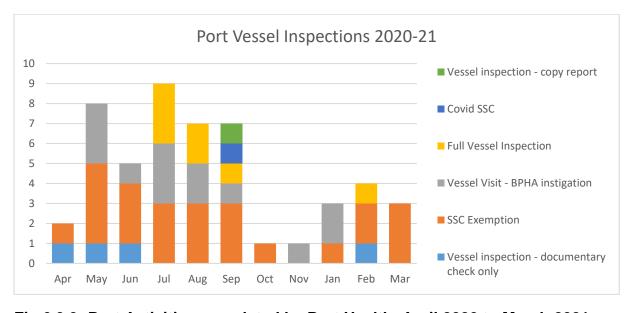


Fig 6.3.3: Port Activities completed by Port Health, April 2020 to March 2021

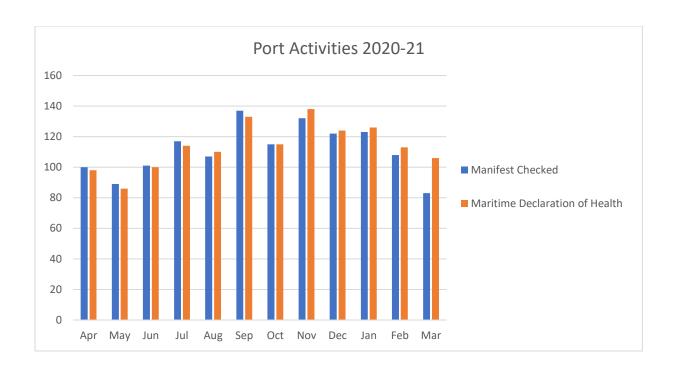
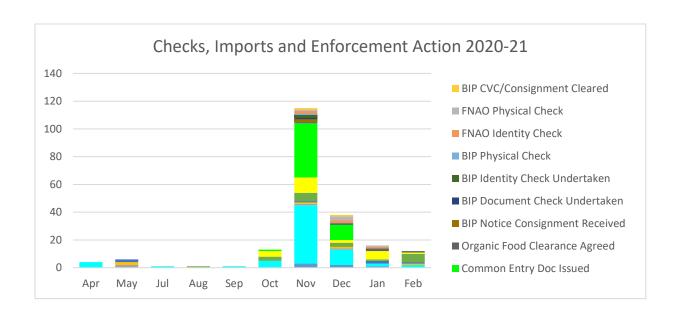


Fig 6.3.4: Checks, Imports and Enforcement Action taken by Port Health, April 2020 to March 2021



7. Screening and Immunisations

All screening and immunisation programmes have been impacted by the COVID-19 pandemic in 2020/21. The impact has been both to programme delivery and data quality and timeliness. Therefore, the data contained in the report is not necessarily comparable to previous years and should be viewed in the context of the pandemic.

7. Immunisations

Immunisations are acknowledged as one of the most significant public health developments in the prevention of infectious disease.

7.1 Childhood immunisations

Childhood immunisation uptake data (2020/21) in Bristol are similar to the England average, although it should be noted that we remain below the national clinical standard required to control disease and ensure patient safety and 95% population coverage is required to protect. MMR and DTap-IPV 2nd vaccines at age 5 are of particular concern with neither reaching 90% (See **Fig. 7.1.1**), although both have seen small increases compared to 2018/19.

The UK-wide Measles and Rubella Elimination Strategy was released in 2019 and a South West-wide action plan was developed to support implementation of the plan following a regional conference on measles held in February 2020. The Bristol contribution to the plan was developed via the BNSSG immunisation group led by Public Health England (PHE). Projects included practice visits and uptake plans to GP practices with lower MMR uptake and comms and media activity to promote the MMR vaccine. Detailed work was undertaken from December 2019 to March 2020 by Bristol City Council, Public Health and PHE to gather insight into current behavioural barriers and enablers of childhood vaccination uptake in Bristol, from the perspective of parents and professionals. There was a particular focus on the MMR vaccine, and the Somali community in Bristol because this is a group identified, locally and nationally, as being at risk of under-immunisation, especially for MMR. This was put on hold due to the pandemic but is currently being reviewed in order to re-start this work.

Fig 7.1.1: Childhood Vaccination Coverage Statistics: Bristol 2020-217

Changes to the timing and delivery of infant BCG to eligible babies (this is a targeted immunisation programme) and rotavirus vaccines have been put in place across the South West following the evaluative rollout of Severe Combined Immunodeficiency (SCID) as part of the Newborn Blood Spot programme in certain parts of England.

7.2 Shingles

The shingles vaccine is offered to people aged 70 to 79 years old. From September 2021, an additional Shingles vaccine (Shingrix) will be introduced for eligible individuals who are immunocompromised.

Shingles vaccination uptake has been affected by the pandemic, as this vaccination has been offered opportunistically up until April 2021, from when 70-year-olds should be actively called for a vaccine.⁸ A Shingles campaign was run in the South West in August 2021 to improve public awareness of the Shingles vaccination and work is ongoing to review vaccine coverage across each area and identify GP practices with low coverage. It is expected that the flu and COVID-19 booster programme may impact on Primary Care's ability to deliver Shingles vaccines this winter.

7.3 Pneumococcal

The pneumococcal vaccine (PPV) protects against serious and potentially fatal pneumococcal infections. Pneumococcal infections are caused by the bacterium Streptococcus pneumoniae and can lead to pneumonia, blood poisoning (sepsis) and

⁷ NHS Digital Childhood Vaccination Coverage Statistics - 2020-21

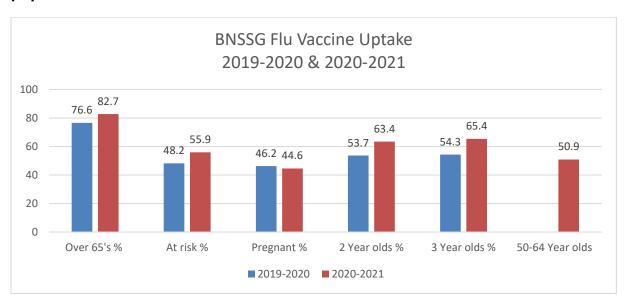
⁸ NHS England, 2021 Update on vaccination and immunisation changes for 2021/22

meningitis. The vaccine is offered to adults aged 65 or over plus those with long-term health conditions such as serious heart or kidney conditions. Vaccine shortages of PPV remain an issue nationally and have a significant effect on coverage.

7.4 Flu

Uptake of flu immunisation across all cohorts rose in 2020/21 compared to the previous season, the greatest increase was in uptake of 2 and 3-year olds (See **Fig.7.4.1**). Flu immunisation uptake was broadly in line with other areas across the region. The flu programme was extended to 50-64 year olds and this will continue for the 2021/22 season.

Fig 7.4.1: Flu Vaccination uptake for different groups across the BNSSG population⁹



In Bristol specifically, vaccination uptake also increased, according to seasonal flu uptake reports from 2020/21. We saw the greatest uptake in the over 65's with 81% vaccinated. 52.3% of under 65's in the 'at-risk' category were vaccinated and 41.1% of pregnant women.

¹ Official Statistics, GOV.UK (2021), Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 20218. Screening

-

⁹ Vaccine uptake guidance and the latest coverage data - GOV.UK (www.gov.uk)

8 Screening

8.1 Screening Programmes

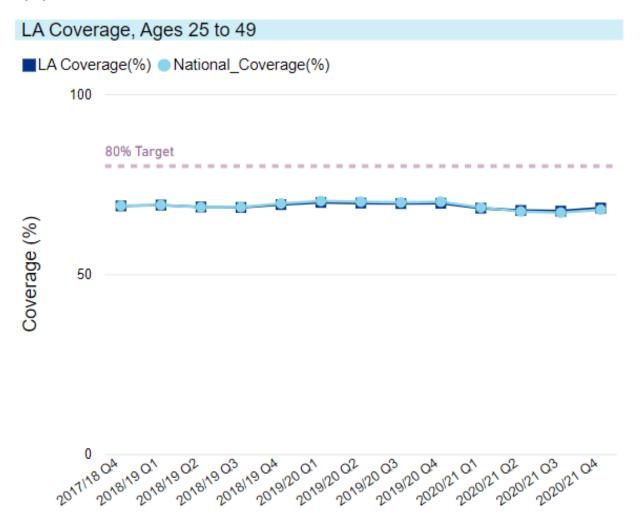
The UK National Screening Committee defines screening as "The process of identifying apparently healthy people who may be at increased risk of a disease or a condition so that they can be offered information, further tests and appropriate treatment to reduce their risk and/or complications arising from the disease or condition." There are currently three national cancer screening programmes: breast, bowel and cervical; and eight non-cancer screening programmes: six antenatal and newborn (Fetal Anomaly, Infectious Diseases in Pregnancy, Sickle Cell and Thalassaemia, Newborn and Infant Physical Examination, Newborn Blood Spot and Newborn Hearing) and two young person and adult (Abdominal Aortic Aneurysm and Diabetic Eye).

8.2 Cervical Screening

The NHS cervical screening programme in Bristol has continued throughout the pandemic. Women who had received previous cervical treatment (short recall period) received their invitation letters when due, however during the period between March and August 2020 women who were due to be invited for their routine screen had a delay in receiving their invitation letter.

Cervical screening data is broken down into two specific age groups, 25-29 and 50-64 years. For the 25-49 age group, there has been no significant change in coverage with 68% of women accepting a cervical screen. For the last 4 years our screening rates to this group have been similar to the England rate but remains lower than the South West rate and the 80% acceptable target (See **Fig.8.2.1**). Based on 2020/21 data there were over 30,000 eligible women age 25-49 in Bristol who did not receive their cervical screen.

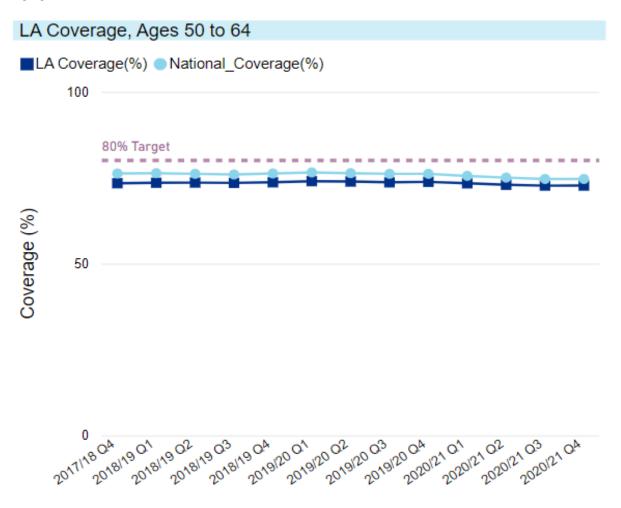
Fig 8.2.1: Cervical cancer screening coverage in Bristol - women 25-49 years, 2018-21¹⁰



In the older age group, 50-64, uptake is higher at 73%, again a stable position over the last 3 years, but a downward trend over the last 10 years. This is lower than the England coverage, as shown in the Figure below. Just over 9000 eligible women in Bristol were not screened in 2020/21 (See **Fig.8.2.2**).

¹⁰ NHS digital Cervical Screening Programme - Coverage Statistics Local authority dashboard

Fig 8.2.2: Cervical cancer screening coverage in Bristol – Women 50-64 years, 2018-21³



8.3 Bowel Screening

The Bristol centre recovered the screening backlog in July 2021. The backlog was created by the pause in service between April 2020 and June 2020 due to the COVID-19 pandemic.

Bristol's bowel screening rates increased in the three years between 2017/18 and 2019/20 with over 4000 more people accepting a screen in 2019/20 compared to 2017/18. While this was positive progress, Bristol coverage remained lower than both the South West and England. Data for 2020/21 screening coverage at local authority level is not currently available. Indications are that it will be released in 2022. In Bristol specifically, we have seen an increase from 50.7% in 2015 to 60.5% in 2020 (See **Fig 8.3.1**).

Table 8.3.1: Bristol Bowel Screening coverage 2015-2020¹¹

Period		Bristol					
		Count	Value	95% Lower CI	95% Upper CI	South West	England
2015	•	24,773	50.7%	50.3%	51.2%	60.3%	57.1%
2016	•	26,323	52.9%	52.5%	53.4%	61.5%	57.9%
2017	•	27,253	54.5%	54.0%	54.9%	62.6%*	58.8%*
2018	•	27,631	54.2%	53.7%	54.6%	62.3%*	59.0%*
2019	•	28,731	55.7%	55.2%	56.1%	63.4%*	60.1%*
2020	•	31,652	60.5%	60.1%	60.9%	67.2%*	63.8%*

The below table uses published data provided as part of the programme's Key Performance Indicators (KPIs). In Q1 we had no data for BNSSG CCG, SW Region and England but by Q2 we had 71.8% for the BNSSG CCG, 69.7% in Q3 and 72.2% in Q4. This was comparable to SW Region and England whose rates were 73.9 and 68.7% in Q2, 73.4 and 69% in Q3 and 74.46 and 71% in Q4, respectively.

	Q1	Q2	Q3	Q4
BNSSG CCG	No data	71.8%	69.7%	72.2%
SW Region	No data	73.9%	73.4%	74.46%
England	No data	68.7%	69%	71%

BNSSG Bowel Cancer Screening % Uptake April 20-Apr 21¹²

Changes to the Bowel Screening Programme this year include the decision to no longer commission the bowel scope screening programme from December 2020. This programme was being rolled out for people aged 55 to have a one-off flexible sigmoidoscopy, however the decision has been made to introduce the new faecal immunochemical test (FIT) instead and extend the offer to a larger cohort. This age extension will initially expand the offer to include those aged 56 and include 50 year olds by 2024-25. Bristol Bowel Screening Programme will commence inviting the age 56 cohort in August 2021.

¹¹ Public Health Profiles - PHE

¹² NHS screening programmes: KPI reports 2020 to 2021 - GOV.UK (www.gov.uk)

8.4 Breast screening

Bristol's breast screening rates have remained static over the 3 years prior to 2019/20, with 2019/20 reporting only 71% of eligible women being screened (See **Fig.8.4.1**). This is below both the South West (76.4%) and National levels (74.1%). Due to COVID-19 we do not have granular detail on the demographics of who is being missed for this year. More recent coverage data is not available.

Fig.8.4.1: Bristol Breast Screening Coverage¹³

		Bristol					
Period		Count	Value	95% Lower CI	95% Upper CI	South West	England
2010	•	24,425	73.5%	73.0%	74.0%	79.5%	76.9%
2011	•	25,356	73.6%	73.2%	74.1%	79.5%	77.1%
2012	•	25,919	73.8%	73.3%	74.2%	79.1%	76.9%
2013	•	26,137	72.8%	72.4%	73.3%	78.9%	76.3%
2014	•	26,856	73.6%	73.1%	74.0%	78.9%	75.9%
2015	•	27,086	73.2%	72.7%	73.6%	78.6%	75.4%
2016	•	27,597	73.5%	73.0%	73.9%	78.3%	75.5%
2017	•	27,901	73.0%	72.5%	73.4%	78.1%*	75.4%*
2018	•	27,544	71.1%	70.7%	71.6%	77.6%*	74.9%*
2019	•	27,893	70.9%	70.5%	71.4%	77.0%*	74.5%*
2020	•	28,274	71.0%	70.5%	71.4%	76.9%*	74.1%*

Age Extension (AgeX) trial

This trial commenced in 2009 and was embedded within the routines of the Avon NHS breast screening programme. This involved woman aged 47 to 49 and 71-73 years. Following the suspension of routine breast screening in March 2020 due to COVID-19, and the substantial and prolonged overload on the Avon breast screening programme when screening re-started, the AgeX investigators decided in May 2020 that further randomisation into AgeX should cease permanently. For breast cancer mortality the first report is scheduled to be on the follow-up to 2026, after which there will be subsequent reports on longer follow-up

46

¹³ Public Health Outcomes Framework C24a - Cancer screening coverage - breast cancer

Self-referrals

Due to COVID-19, self-referrals into the Avon NHS breast screening programme were temporarily suspended. Women aged 71 years and over have been able to self-refer into the screening programme for a number of years with no upper age limit. This was restarted in late 2020.

8.5 Antenatal and newborn Screening

The antenatal and newborn screening services covering the Bristol locality area are delivered by NBT and UHBW. Performance and quality indicators are monitored by the NHSEI Screening and Immunisation team and assurance provided to the Bristol Health Protection Committee. Significant delays and breaches in the Foetal Anomaly Screening Programme at NBT have occurred in 2021, in part due to workforce capacity. This has been classed as a serious incident and is being closely managed, working closely with the Trust and relevant stakeholders including the Screening Quality Assurance Service (SQAS)

Non-invasive Pre-natal Testing (NIPT) was successfully implemented in 2021 in line with the national deadline.

8.6 Diabetic Eye Screening

Diabetic eye screening is offered to anyone with diabetes who is 12 years old or over on an annual basis. The Diabetic Eye Screening Programme has a funded restoration plan in place, to support the recovery of the service due to the programme pause and impact of COVID-19 in the reporting period. The programme is on track to recover the backlog by the end of November 2021 which is well within the national target date of March 2022.

8.7 AAA Screening

Abdominal Aortic Aneurysm (AAA) Screening is offered to men during the year they turn 65. If a AAA is identified in an individual, they will then be entered into a quarterly or annual surveillance programme, or referred for assessment for vascular surgery, depending on the size of the aneurysm. AAA Screening was suspended during the peak of the pandemic, with a phased restart between June-Sept 2020. The Bath, Bristol and Weston AAA screening programme is due to fully recover its services by the national deadline of March 2022 (+2 months grace period to allow for men invited during March to attend).

8.8 Increasing screening uptake and equity of access

The NHSEI Screening and Immunisation Team is updating the regional Inequalities Strategy for Screening and Immunisation Programmes in the South West, to renew focus on ensuring access for all.

Work is ongoing with the Somerset, Wiltshire, Avon, and Gloucestershire Cancer Alliance to support primary care networks to embed screening uptake in practice, as part of the cancer early diagnosis enhanced service specification arising from the NHS Long Term Plan.

9. Environmental hazards to health, safety, and pollution control

9.1 Air Quality

Poor air quality can have an impact on health at all stages of life, from being associated with low birth weight, impacts on lung function development in children, an increased risk of chronic disease and acute respiratory exacerbations, to acute and chronic premature death. Latest evidence is linking air pollution with impacts on cognitive function. All these health impacts can impact upon a person's quality of life. The most vulnerable are the young and old.

Air quality in Bristol is sufficiently poor in many locations for the health impacts described in the previous paragraph to be experienced by citizens in Bristol. Monitoring data shows continued exceedances of the annual mean nitrogen dioxide (NO₂) air quality objective close to roadside locations in the city centre and along the main arterial routes. Concentrations of NO₂ do, however, appear to be declining but further urgent action is needed to comply with legal limits.

The COVID-19 lockdowns in 2020 and early 2021 reduced concentrations of traffic pollutants but this change is temporary in nature.

A report commissioned by BCC^{14} calculated that approximately 300 deaths of Bristol residents can be attributed to air pollution (particulate matter - $PM_{2.5}$ and nitrogen dioxide – NO_2) in 2013. This equates to 8.5% of all deaths in Bristol annually. These deaths attributed to air pollution compare, on average, to 9 people killed in road traffic collisions in Bristol each year.

9.2 Air Quality Management Area

Road transport is a major source of particulate matter and nitrogen oxides (NO_x) accounting for 34% of nitrogen oxides and 12% of primary particulate matter ($PM_{2.5}$) emissions in the UK¹⁵. At busy roadside locations the contribution of traffic to nitrogen oxides can be greater than 80%.

Through monitoring of the city's air quality, a geographical area has been identified where health standards (known as objectives) are not achieved, and an Air Quality Management Area (AQMA) has been established in line with DEFRA (Department for Environment and Rural Affairs) recommendations (See **Figure 1**).

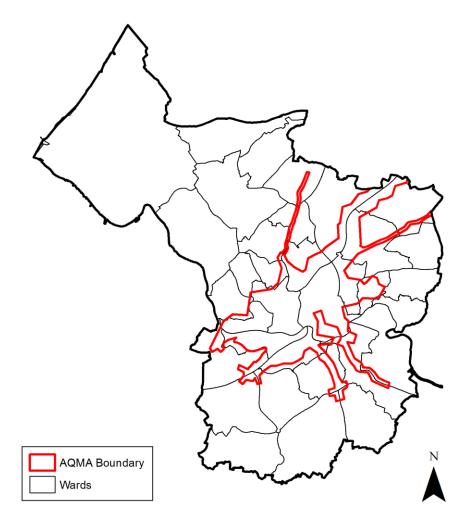
Fig. 9.2.1 indicates the boundary of the Air Quality Management Area (AQMA) for Bristol, inside which air quality is at risk of exceeding government objectives.

¹⁴ Air Quality Consultants (2017. Health Impacts of Air Pollution in Bristol.: Air Quality Consultants Ltd ¹⁵ Department for Environment, Food and Rural Affairs (2018). Clean Air Strategy 2018.

The AQMA is based around busy road junctions and arterial roads where nitrogen dioxide from the exhausts of vehicles does not get readily dispersed because of the surrounding buildings.

Domestic solid fuel burning is a re-emerging area of concern. Recent evidence shows that this source contributes to 38% of all PM^{2.5} emissions nationally.

Fig. 9.2.1 Map of Bristol's Air Quality Management Area (AQMA)



Source: OS data © Crown copyright & database rights 2021 Ordnance survey 100023406

Air pollution generated from human sources such as the combustion of fuels for heat, electricity and transport is having an adverse effect on the health of Bristol's communities. In 2019, 5.0% of "all-cause adult mortality" in Bristol was considered

attributable to "anthropogenic particulate air pollution" ¹⁶, which is slightly lower than the national proportion (5.1%) and is mid-ranking for English Core Cities.

The proportions of deaths attributable to air pollution vary across the city in relation to pollutant concentrations, from around 7% in some wards to around 10% in others. Concentrations are highest in the centre of the city and therefore so are deaths attributable to air pollution.

A Clean Air Zone (CAZ) is in development with plan to implement from in 2022. Additional measures are being considered to address PM_{2.5} emissions from domestic solid fuel burning. Clean Air for Bristol | Bristol Clean Air Zone | Clean air for everyone

9.3 Avonmouth

A community oversight group has been established in the Avonmouth ward, working alongside the MP and local Councillors to look into complaints of fly pollution in the area. A fly expert has been commissioned to independently produce a report to be shared with all parties.

A number of historical complaints pertaining to flies were alleged to be linked with a local waste plant that has recently closed down. This has reduced the number of complaints significantly.

Moving forward we are continuing to monitor the local situation and work with the MP Cllrs and community.

-

¹⁶ Via Public Health Outcomes Framework (PHOF), 2017

10. Emergency Preparedness, Resilience and Response (EPRR)

10.1 Control of Major Accident Hazards (COMAH)

Bristol City Council (BCC) Civil Protection Unit (CPU) has a duty to work with operators of COMAH sites. They are reviewing the Severnside External Emergency Plan, which covers sites in both Bristol and South Gloucestershire. This plan coordinates the emergency response of many organisations to a COMAH incident at Severnside. The Severnside multi-agency activation and notification was tested in Exercise Nova One, November 2021.

10.2 Interruption to Water Services

Bristol Water has a duty to provide water in bottles and bowsers in the event of a burst main or other loss of service. Bristol Water has a list of priority and vulnerable customers. BCC holds similar information. In the event of water failure Bristol Water and CPU work together to ensure that vulnerable people are identified and protected. This plan is activated a few times each year. In particular, a large burst water main during Christmas 2020 with a major incident declared, primarily due to the then current pandemic rates and lockdown situation, resulted in the need for mutual aid to support the delivery of water to those vulnerable; and making water accessible to the effected communities.

10.3 Warning & Informing

In December 2020 a tragic explosion at Wessex Water in Avonmouth where four people died also gave concern for Public Health in the form of a non-visible 'plume'. There was a delay in requesting Chemical Meteorology (CHEMET) for plume projections, to assess any airborne chemicals/gases from the contents of the silos which exploded. Local Authority Public Health colleagues along with Environmental Health Officers ascertained what the contents were and provided the public health messaging required. The learning from this is to raise awareness that all agencies can request a CHEMET and not all plumes are visible, by being solely smoke/vapour.

10.4 Avon and Somerset Local Resilience Forum (ASLRF)

In Summer 2019 the National Security Risk Assessment (NSRA) was published and is due to be updated again in 2022. ASLRF has been using the NSRA to update the community risk register, and prioritising plans, training and exercising to suit. This is also being done alongside the Local Health Resilience Partnership (LHRP) for shared situational awareness and joint understanding of risk, as well as collaborating on

plans, training and exercising to avoid duplication and ensure the correct agencies and subject matter experts take part in the workstreams

The ASLRF Health related priorities, in collaboration with LHRP partners, for the next 12-24 months are:

- Psycho-social support (linked to Friends and Family Reception Centre's (FFRCs), Survivor Reception Centre (SRC's), Humanitarian Assistance Centre (HAC's) LHRP to lead development of Regional Psychosocial and Mental Health Response Plan for incidents.
- Mass casualties Plan/Framework This work stream is included in NHSE&I South West EPRR Strategic Plan 2021-2024.
- Review Vulnerable People Information Sharing Document ASLRF 2022.
- Identify Monitoring Sites and control measures for Surveillance of Invasive Mosquitoes – UKHSA 2023.

The ASLRF is also looking at future risks to the health system, including those caused by supply chain failures, collapse of a care provider, pandemic flu, and other issues.

10.5 Protest and Public Order

Over this reporting period there were 60 protests in Bristol, with the most being reported in June, August, December, and March 2021 (See Fig 10.5.1). There were many more public open-air events. CPU worked with PH and ASC to respond to protests in varying guidance and pandemic infection rates with key messaging and engagement with organisers to either postpone, or complete risk assessments. CPU also work with the multi-agency Bristol Safety Advisory Group for Events (SAGE) to mitigate the public order risks. They also inspected the COVID-19 mitigation plans of the event organisers to minimise the risk of COVID-19 spreading between people attending an event.

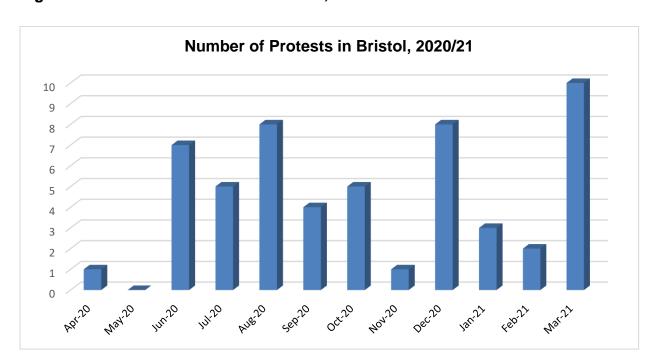


Fig. 10.5.1 Number of Protests in Bristol, 2020/21

10.6 COVID-19 Response

The CPU supported the planning required around Covid Excess Deaths including establishing 'Temporary Resting Places (TRP's) across Avon and Somerset. The CPU were also involved in the establishment of the Bristol Mass Vaccination Centre, Rapid Test Centre and testing sites at local libraries and arranged PPE supplies for these sites. The CPU were integral to Bristol City Council's internal incident and outbreak management and business continuity functions including facilitation of homeworking while entering and exiting lockdowns, continuation of the Operations Centre, supporting the 'We are Bristol' volunteer service and the work of the COVID-19 marshals.

11. Refugee and Asylum Seeker Health

11.1 Use of Bristol Hotel as Contingency Initial Accommodation

In 2020 the Home Office initiated a programme of establishing contingency "Initial Accommodation" (IA) for asylum seekers and refugees. In July a hotel in Bristol was opened as an IA by Clearsprings Ready Homes, the Home Office private contractor. The need for contingency accommodation has been driven primarily because of the pandemic restrictions preventing evictions and new property lets, failure to anticipate the number of "spontaneous arrivals" (usually via small boat crossings from France), and because the Home Office asylum claim decision making process was stalled throughout this period. In terms of Infection, Prevention and Control they are more akin to hostel provision. an outbreak management plan was developed.

Translation of materials into appropriate languages was carried out and given to every room to try and promote COVID-19 symptom recognition with the reception number to phone to understand how to get help. Videos and infographics were shown to people who lacked literacy in their first language and to try and anticipate what was involved in swab testing. Surge testing was carried out in response to an outbreak / cluster infection of three positive cases during February 2021. Uptake of testing by residents was over 85%. The Haven undertook contact tracing for positive cases.

12. Global Population Health

12.1 Global Burden of Disease

Published in October 2020, *The Lancet's* special issue on Global Burden of Disease (GBD) studied the world's most comprehensive data source to review the most up-to-date global health data from 2019 with the latest analysis¹.

There was some positive news from the GBD Risk Factors Study such as 'global life expectancy at birth increased from 67·2 years in 2000 to 73·5 years in 2019'2. However, there are still important challenges regarding certain diseases, notably HIV (Human Immunodeficiency Virus)/AIDS (Acquired Immunodeficiency Syndrome) and malaria³.

HIV is a chronic health condition which attacks the immune system and if not treated can lead to the development of AIDS. Although HIV stays in the body for life, there are now highly effective treatments for people living with HIV (PLWH), enabling a normal life expectancy. There are ways to detect and prevent HIV transmission including regular HIV testing and medications which can be taken to prevent the acquisition of HIV. Despite these medical advances, significant challenges still remain.

In 2014 UNAIDs set global targets of ending AIDS as an epidemic by 2030 and to see an end to HIV stigma and discrimination. They set ambitious treatment targets known as the 90:90:90 targets; aiming for 90% of people living with HIV being diagnosed, 90% of those diagnosed receiving treatment and 90% of those receiving treatment having an undetectable HIV viral load by 2020. The aim was to reach these targets by 2020 and reach 95:95:95 targets by 2030. Fast Track Cities is a global initiative which supports high prevalence cities to accelerate progress in these UNAIDS targets. The UK met the 90:90:90 targets in 2018 and Bristol is currently estimated to have reached 93: 98: 97

12.2 Measles

Nationally there has been a reduction in the number of measles cases reporting for this reporting period. The routine surveillance and epidemiology of measles has been impacted in a number of ways by the COVID-19 pandemic, such as a reduction in international travel reducing infection and transmission and social distancing and lockdown measures⁵. Measles is confirmed by oral fluid IgM antibody tests or PCR. The table below indicates a reduction of cases from 53 in quarter 1 of 2020 to 0 in quarter 4 of 2020, compared to 153 cases in quarter 1 of 2019 and 70 cases in quarter 4 of 2019 (See **Fig.12.2.1**).

Fig 12.2.1 Numbers of positive cases of measles reported in England in 2020/21

Year	Quarter	Uncorrected notified cases	Number tested	%	Number positive	%
2021	1*	45	41	91.1%	1	2.4%
2020	4*	60	79	131.7%	0	0.0%
2020	3	75	87	116.0%	0	0.0%
2020	2	73	71	97.3%	0	0.0%
2020	1	490	517	105.5%	53	10.3%
2019	4	565	633	112.0%	70	11.1%
2019	3	516	656	127.1%	86	13.1%
2019	2	813	951	117.0%	217	22.8%
2019	1	527	672	127.5%	153	22.8%

Source: GOV.UK6

Specifically, in Bristol, we experienced no measles outbreaks in 2020/21. This is likely to be due to the combination of travel restructions here and abroad and several lockdowns. The last significant outbreak of measles in Bristol was in 2018.

¹ The Lancet (2020). Global Burden of Disease [online]. Available at: The Lancet: Global Burden of Disease

² The Lancet (2020). Global Health: Time for Radical Change? [online]. Available at: Global health: time for radical change? (thelancet.com)

³ Ortiz-Ospina, E. and Roser.M (2016). *Global Health* [online]. Available at: Global Health - Our World in Data

⁴ Bristol HIV Health Needs Assessment (2020).

⁵ Laboratory confirmed cases of measles, rubella and mumps, England: January to March 2021 (publishing.service.gov.uk)

⁶ Measles notifications and confirmed cases by oral fluid testing 2013 to 2021 by quarter - GOV.UK (www.gov.uk)

13. COVID-19

13.1 Timeline

Since the beginning of the pandemic Bristol has seen 4 separate waves of COVID-19 (See Fig. 13.1.1).

The first wave lasted from March 2020 to May 2020 in Bristol. At the time testing was limited to patients and hospital staff, community testing was unavailable to most people, so reported number of cases will have been artificially low. During this first wave 1,179 people tested positive for COVID-19, 1,248 people were admitted to hospital with COVID, and 229 people died. On 23rd March 2020 the first national lockdown started, cases in Bristol peaked on 24th April 2020 and lockdown restrictions started to be eased in early June. Testing was expanded to wider community testing from May 2020. Testing capacity increased throughout the summer and autumn (See **Fig.13.1.2**). From late September, we saw rapid spread in all groups but mostly in young people aged 18 to 23. We experienced an average of between 1,500 and 2,500 tests were being performed daily in Bristol. New case rates continued to rise into November, peaking in early November at almost twice the national rate (**Fig.13.1.2**).

The country was put into a second national lockdown on 5th November (although schools remained open) and case rates in Bristol reduced. National lockdown ended on 2nd December 2020. Bristol was put into Tier 2 lockdown on the 19th December and then Tier 3 on the 23rd December. Cases had been rising in Bristol again from mid-December, along with the rest of the country. In the new year the country entered a third national lockdown on 6th January, including school closures.

Bristol new case rates peaked at 508 per 100,000 on 8th January – this equates to 2,356 new cases in 7 days. At this time 99% of neighbourhoods (LSOA's) in Bristol had at least one new case of COVID-19. Following the lockdown in early January 2021cases fell in Bristol to a very low level by May 2021(**Fig.13.1.2**).



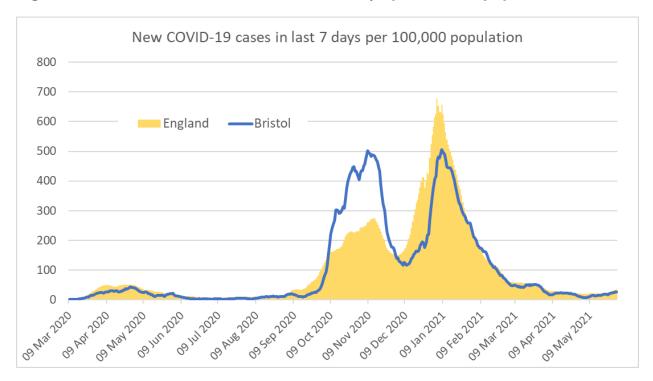
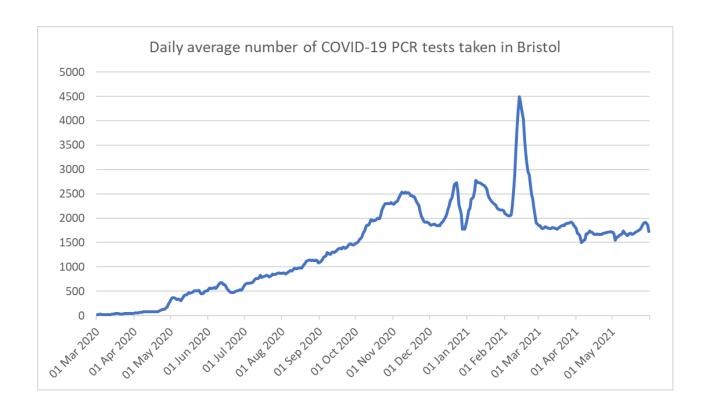


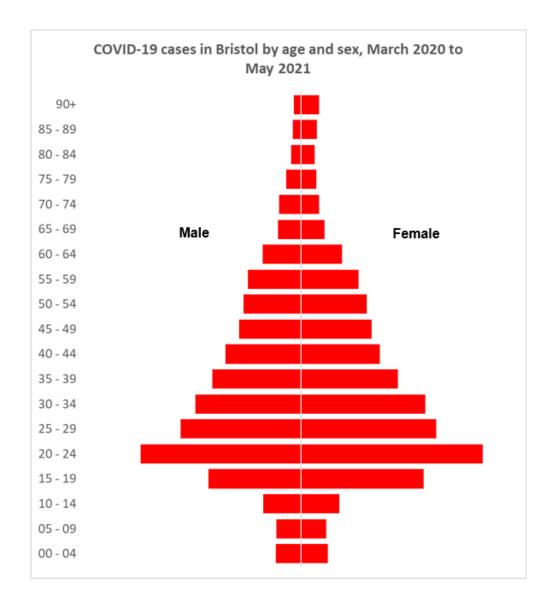
Fig.13.1.2 Daily average number of COVID-19 PCR tests taken in Bristol



13.2 Cases

Overall, between April 2020 and 31st May 2021 there were 31,075 reported positive cases of COVID-19 in Bristol. 8.6% were in the over 65's, 64% aged under 40 years. 47% were male, 53% were female (See **Fig. 13.2.1** and **Fig.13.2.2**).

Fig. 13.2.1 Total number of COVID-19 cases within Bristol by age, group, and sex.



Source: Public Health England and Bristol City Council, Joint Strategic Needs Assessment.

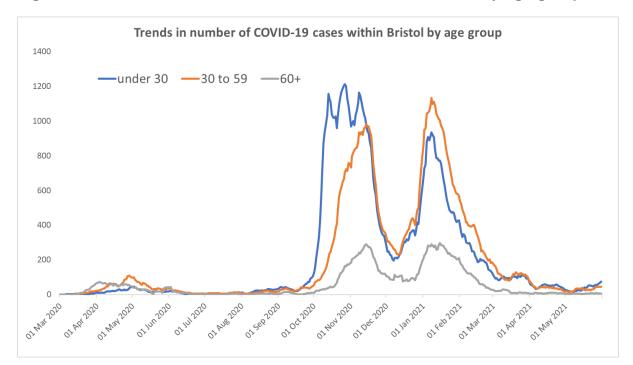


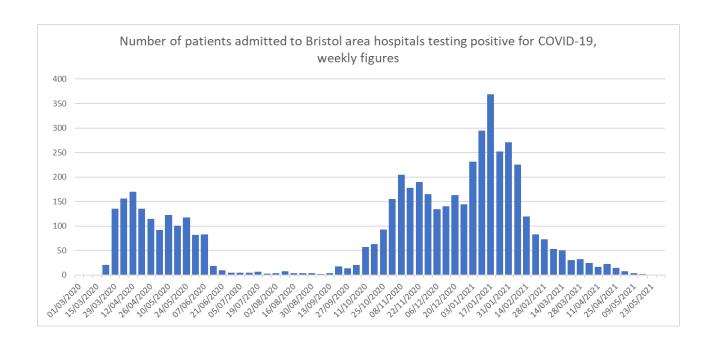
Fig. 13.2.2 Trend in number of COVID-19 cases within Bristol by age group.

Source: Public Health England and Bristol City Council, Joint Strategic Needs Assessment.

13.3 Hospitalisations

5,085 people with COVID-19 were admitted to the two main hospital trusts that serve Bristol (not necessarily just Bristol residents) between April 2020 and March 2021. Not all patients were admitted to hospital for the treatment of COVID-19, a proportion were admitted for other reasons but also tested positive for COVID-19. It is not currently possible for hospital trusts provide figures on the two separate groups of "admitted for COVID-19" and "admitted with COVID-19".

Fig. 13.3.1 Trend in weekly number of positive COVID-19 patients admitted to Bristol hospitals.

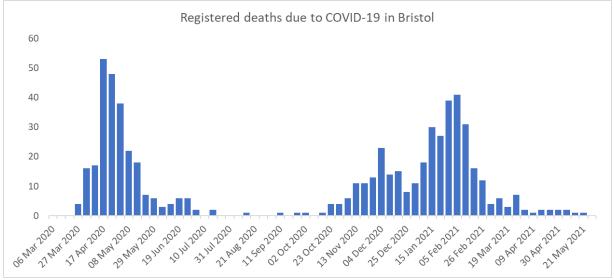


13.4 Mortality

This document uses the Office for National Statistics definition of COVID-19 mortality based upon the cause of death at death registration. Between 1st April 2020 and 31st March 2021, a total of 611 Bristol residents died of COVID-19. Below is a chart showing the time trend of deaths in Bristol.

Registered deaths due to COVID-19 in Bristol 60

Fig. 13.4.1 Trend in weekly number of COVID-19 deaths registered in Bristol



Source: Office for National Statistics.

13.5 Vaccinations

COVID-19 Vaccinations started in Bristol on 8th December 2020. Between April 2020 and March 2021, 6 % of adults (16+ years) in Bristol have had complete vaccination (2 doses) for COVID-19. The table below shows the breakdown by age and compares Bristol to the local health system across Bristol, North Somerset, and South Gloucestershire (BNSSG), South West region and England overall.

Fig. 13.4. Numbers and approximate population coverage between 08 Dec 2020 and 31st March 2021.

Covid-19 vaccinations: Numbers and approximate population coverage Vaccinations delivered between 08 Dec 2020 and 31 Mar 2021 Source: coronavirus.data.gov.uk

	1st dose - Approx population coverage					
	Bristol	BNSSG	SW	ENG		
12yrs+*	40%	48%	55%	48%		
16yrs+	42%	51%	58%	51%		
60yrs+	91%	94%	94%	92%		
50-59yrs	78%	83%	86%	80%		
40-49yrs	34%	39%	39%	35%		
30-39yrs	21%	22%	24%	22%		
18-29yrs	15%	16%	17%	15%		
16-17yrs	3%	4%	4%	3%		
12-15yrs*	0%	0%	0%	0%		

	2nd dose - Approx population coverage					
	Bristol	BNSSG	SW	ENG		
12yrs+*	6%	7 %	7%	7%		
16yrs+	6%	7%	8%	7%		
60yrs+	15%	16%	14%	15%		
50-59yrs	6%	6%	6%	6%		
40-49yrs	5%	5%	6%	4%		
30-39yrs	4%	4%	4%	3%		
18-29yrs	3%	3%	3%	2%		
16-17yrs	0%	0%	0%	0%		
12-15yrs*	0%	0%	0%	0%		

^{*}Please note that statistics presented for 12-15yrs above do not include all school administered vaccinations to this age-group at present.

Source: coronavirus.data.gov.uk

13.5 Further data / links:

- Bristol COVID-19 web pages https://www.bristol.gov.uk/coronavirus/what-you-need-to-know
- Bristol data Director of Public Health twice weekly report -

https://www.bristol.gov.uk/coronavirus/covid-19-data-cases-bristol-r-number-south-west

Office for National Statistics COVID-19 web pages -

https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases

- UK Government COVID-19 data dashboard https://coronavirus.data.gov.uk/
- Public Health England https://www.gov.uk/government/organisations/public-health-england

13.6 Bristol specific

Local Outbreak Management Plan (LOMP)

In June 2020, we produced a Bristol Local Outbreak Management Plan, setting out actions taken to anticipate, prevent and response to outbreaks of COVID-19 in our city. Local Outbreak Management Plans are a mechanism through which local areas manage these risks using their knowledge of and relationship with their people and place. Every upper Tier (Public Health) Authority was required to have in place a Covid-19 Outbreak Management Plan by the end of June 2020 to anticipate, prevent and contain incidents and outbreaks of Covid-19 in local areas. These plans will be in place for the foreseeable future and reviewed regularly.

Our Local Outbreak Management Plan was required to provide clarity on how Bristol City Council would work with the NHS Test and Trace Service to ensure a whole system approach to managing local outbreaks and as required by government, and was centred around seven core themes:

- **1. Care Homes and Schools:** Planning for local outbreaks in care homes and schools defining monitoring arrangements, identifying potential scenarios, and planning the required response.
- **2. High risk contexts, workplaces, and communities:** Identifying and planning how to manage other high-risk places, locations and communities of interest including sheltered housing, dormitories for migrant workers, transport access points, such as ports and airports; detained settings and rough sleepers. Defining preventative measures and outbreak management strategies.
- **3. Supporting vulnerable local people** to get help to self-isolate and ensuring services meet the needs of diverse communities.
- **4. Testing:** Oversight and swift mobilisation of local testing capability. Identifying methods for local testing to ensure a swift response that is accessible to the entire population. To include delivering tests to isolated individuals, establishing local popup sites, or hosting mobile testing units at high-risk locations.
- **5. Contact tracing** undertaken by Public Health England with the Bristol Public Health Team in complex situations. Assessing local and regional contact tracing and infection control capability in complex settings and the need for mutual aid.
- **6. National, regional, and local intelligence** to identify and respond swiftly to outbreaks: Integrating national and local data, including developing dashboards and the Joint Bio-Security Centre to inform planning and response.
- **7. Governance:** Establish governance structures led by a new Covid-19 Health Protection Board and a new member-led Board to communicate with the general public.

In March 2021, as our schools were opened and continued support was needed for our workplaces and economy, a newly revised LOMP was published which focuses on 7 key themes:

- Preventing and responding to outbreaks, including plans to respond to new variants of concern
- 2. Testing, tracing, and isolating to identify and break chains of transmission
- 3. Communication and engagement, including when and how we share information with the public, schools, businesses, vulnerable people, care home staff and residents, and other groups of people
- 4. Data: understanding national, regional, and local data and using it to inform what we do
- 5. Recovery, including supporting the economy to reopen and make sure as many people as possible can get a vaccine
- 6. Protecting and supporting people in Bristol, including those who are homeless or have complex needs
- 7. Enforcement, when it's needed to keep the public safe

The plan for Bristol is part of a network of plans in every local authority in England. It will be regularly reviewed as events continue to evolve and develop.

In November 2020, the government published the COVID-19 Winter Plan which set out a programme for suppressing the virus, protecting the NHS and vulnerable people, keeping the economy going and providing a route back to normality. This plan focused on vaccine roll out, the introduction of a national Tier System, new treatments and plans for schools and businesses. View the Covid-19 Winter Plan online.

In December 2020 the NHS Test and Trace Business Plan was published. This set out the strategic intention for the national Test and Trace programme, including how partners, including local authorities will be expected to function within a 'team of teams' in the delivery of test and tracing activity. A new National Testing Strategy is expected to be published in the spring of 2021. The NHS Test and Trace Business Plan can be viewed online.

13.7 Serious Incidents

During 2020/21, a significant increase in HCAI related serious incidents was reported to the CCG, all of which related to COVID-19. This is an evolving situation, in terms of national guidance, definitions of serious harm, and the reporting of COVID-19 cases by contracted providers. During 2020/21, 32 COVID-19 related cases were reported by University Hospitals Bristol and Weston (UHBW) and 57 by North Bristol Trust. Sirona care and health also reported 5 incidents related to outbreaks. As at the 31st March 2021, 31 completed investigations have been received by the CCG.

During quarter one 2021/22, the review process for COVID-19 related SI's will begin, and key lines of enquiry will be developed against which to provide assurance to enable closure. A thematic report will also be shared with the Quality Committee and system partners at the BNSSG HCAI Group.

Further details about Bristol City Council's COVID-19 response can be found here in the March 2021 revision.