

# Health Protection Forum Annual Report 2023/24

Health and Wellbeing Board

September 2024

Birmingham Health Protection Team,  
Birmingham City Council Public Health Division



**BE BOLD BE BIRMINGHAM**

OFFICIAL

 **Birmingham**  
City Council

## Contents

Foreword .....

### 1. Introduction

#### 1.1 Assurance statement

### 2. Actions from previous report

### 3. Health Protection Updates

#### 3.1 Positive achievements

#### 3.2 On-going work

#### 3.3 Areas of concern

### 4. Health Protection Topic Areas

#### 4.1 Screening and immunisation

#### 4.2 Infection Prevention and Control

#### 4.3 Non-communicable diseases and environmental hazards

#### 4.4 Communicable diseases

#### 4.5 Oral health

#### 4.6 Food safety and standards

#### 4.7 Communications

### 5. Conclusions

### 6. Glossary

### 7. References

#### 7.1 Contributors

## Foreword

Health Protection is one of the three domains of public health, and it is an important pillar that contributes to the improvement and maintenance of the health of everyone living in, working in and visiting Birmingham.

Birmingham is a super diverse city, and this fact provides challenges as well as opportunities for health protection. Recovery, after the COVID-19 pandemic, has been slower for some services than others e.g. NHS screening and immunisation services. The council declared section 114 in June 2023, and this has impacted significantly on the delivery of non-statutory environment health services. In autumn 23-24, there was an outbreak of measles across the country and internationally, but Birmingham was significantly impacted. There were opportunities to work across the Birmingham and Solihull Integrated Care System and deliver a fast-paced response to the measles outbreak, which has largely reduced since the Spring.

The Health Protection Forum brings together key partners from across the city who work interdependently to deliver improvements in health protection outcomes, on behalf of the Health & Wellbeing Board. The Forum monitors emerging situations and ensures that the health of the citizens of Birmingham continues to be protected. As we leave the COVID-19 pandemic and measles outbreak behind us, we continue to prepare for known threats such as Mpox whilst working through existing and on-going health protection issues like TB and adverse weather. The Forum does this work tirelessly, to ensure that the health of the population of Birmingham remains protected.

Dr Justin Varney Director of Public Health for Birmingham

## Introduction

The three core domains of public health are health protection, health improvement and health care public health. Health protection focuses on the prevention and reduction of harm to population health caused by infectious diseases, chemical, biological, radiological, and nuclear incidents, and other health threats. Health protection activities include emergency planning, surveillance, response to incidents and disease outbreaks, immunisation and screening programmes.

The Health and Social Care Act (2012, updated in 2022) gives local authorities health protection duties, and the Director of Public Health (DPH) is responsible for ensuring that there are plans in place to protect the health of the population. However, most health protection functions are delivered by teams and organisations that are not part of the local authority public health division, with roles for the United Kingdom Health Security Agency (UKHSA), National Health Service (NHS) England and Integrated Care Boards (ICBs) to deliver health protection at regional and local levels. In addition, local authority environmental health and resilience teams are involved in the delivery of some health protection functions.

The Health Protection Forum (HPF) is a sub-committee of the statutory Health and Wellbeing Board. This forum focuses on facilitating the responsibility of the DPH to provide oversight and assurance of health protection. The HPF provides a link between the Health and Wellbeing (HWB) Board and partner organisations with roles in the delivery of health protection plans. The forum also provides a setting for the exchange of information, scrutiny of plans and analysis of data with all partners with a role in the delivery of health protection in Birmingham, ensuring they are acting jointly and effectively to protect the population's health.

The HPF includes membership from BCC Environmental Health, BCC Resilience, NHS BSol Infection Prevention & Control, NHS Birmingham & Solihull Immunisations & Vaccinations, NHS Birmingham & Solihull System Quality Group (SQG), UK Health Security Agency (UKHSA), Fast Track Cities Plus (FTC+) and NHS England (Midlands).

The Birmingham Health Protection Forum (HPF) has been in operation since 2013. The HPF meets regularly and provides an opportunity for partners to exchange information that is necessary to ensure that they are working together to provide comprehensive health protection services. The HPF last provided a comprehensive annual report to the HWB in February 2022.

Lessons are constantly being learned as new plans develop and incidents are responded to; this report describes and provides updates on the main health protection issues and work areas that the HPF and Public Health Team partners have been engaged with in 2023 and 2024. The report also outlines provides recommendations for the Birmingham HWB.

This report provides assurance to the DPH and the HWB that there are local plans in place to protect population health and that appropriate action plans are in place to address and closely monitor areas of health protection that require development. On behalf of the DPH, the HPF and its members address the following key concerns regarding children and young people's health: immunisation programmes, oral health, screening programmes, infection prevention and control, communicable disease, non-communicable disease and environmental hazards

## 1.1 Assurance statement

This report provides assurance to the DPH and the HWB that there are comprehensive local plans to protect population health and that appropriate action plans are in place to address and closely monitor areas of health protection that require development. The DPH is working through the HPF with its members to address the following key concerns: childhood vaccinations, cancer screening programs, and community infection prevention and control.

## 2. Actions from previous report

**Table 1 Health protection actions identified in the previous HPF report (2022) and the progress that was made in 2023-24.**

Area of health protection	Actions from 2022 HPF report	Progress of actions
<b>Screening and immunisations</b>	NHS England, LA public health and ICBs continue to work to get services back to pre-COVID levels	Measles outbreak of autumn 2023 showed that immunisation levels for NHS immunisations are below the 95% target and more work must be done to increase the uptake in Birmingham otherwise the population remains at risk of outbreaks of vaccine-preventable diseases.
<b>Infection Prevention and Control</b>	The COVID-19 pandemic affected the group's ability to meet and discuss a system response to IPC issues	An Health Protection MoU was agreed between relevant partners in October 2023 - this MoU provides roles and responsibilities for IPC issues across BSol.
<b>Non-communicable diseases</b>	On-going challenges with Environmental Health laws/powers and lack of resources to visit establishments that might be putting the public's health at risk.	HPF continues to support colleagues in Environmental Health despite continued challenges since COVID-19 but also due to section 114 which has led to only reactive and not proactive Environmental Health work being able to be done currently at BCC.
<b>Communicable diseases</b>	Action plans to improve working relationships are being developed, the mapping and gap analysis is being updated. This is an ongoing process. A regional TB and housing pathway for patients with no recourse to public funds (NRPF) has been adopted and implemented in Birmingham over the last 18 months. Processes to support housing and social needs of patients with recourse to public funds are being developed.	Evaluation of the TB NRPF policy has been completed and has been proven to be a strongly positive policy which helps people complete their treatment courses and where there are now fewer cases lost to follow-up. It has also been proven to be a cost-effective policy, saving much money compared to when cases were left in hospital beds when they had no appropriate accommodation whilst on treatment without being a risk to the general population.

### **3. Health Protection updates**

This section provides an at-a-glance summary of health protection developments over the last 2 years. Further information on specific subject areas can be found in Section 4.

#### **Positive achievements in 2023-24**

- Quick, co-ordinated system response to the measles outbreak in autumn 2023
- Over 10,000 more MMR vaccinations given than at the same time period in the previous year
- HP MOU agreed across relevant partners for use during outbreaks and with clear roles and responsibilities of partners agreed
- In collaboration with Birmingham City Observatory, a HPF dashboard is in development which will include key performance indicators for Health Protection to allow the HPF to easily understand where Health Protection interventions and resources are most needed across the city.

#### **On-going work in 2023-24**

- Currently, only reactive (not proactive) work can be carried out by colleagues in Environmental Health due to restrictions caused by the section 114 declared in June 2023.
- Recruitment in EH, NHSE, BCC
- Evaluations of measles response and engagement, to be shared with system partners to influence future service provision

#### **Areas of concern in 2023-24**

- Section 114 declared by BCC in June 2023 has affected the council and its functions, including health protection functions
- Delegation of immunisation and vaccinations from NHSE to the ICB were planned for 2025 but will now be in 2026 – these changes will impact on health protection services
- Preparations for impending outbreaks and planning for resources and strategies to mitigate a potential Mpox outbreak in England.
- Uptake of immunisations across the life-course remains low, meaning residents of Birmingham are at risk of vaccine-preventable disease
- Uptake of cancer screening programmes are lower than national & regional averages
- The complex needs of TB patients with No Recourse to Public Funds (NRPF) requires collaboration between partners and a holistic approach.

## Health Protection Topic Areas

### NHS Screening and Immunisation programmes

#### **NHS Screening Programmes**

In the UK screening programmes exist for a range of conditions, and serve to reduce the mortality, incidence, or severity of a condition through early detection and treatment and to increase choice by identifying conditions or risk factors. The performance of all screening programmes across England reduced significantly during the COVID-19 pandemic period, 2020 onwards, particularly during the lockdown periods. The system is currently working to improve the uptake of screening programmes while achieving performance recovery in Birmingham.

**AAA Programme:** The local programme is running well and achieving the relevant KPIs. There is a renewed national focus on waiting time to vascular intervention. Local time frames are clinically justified but the local service will still explore any improvement opportunities. Ongoing actions will focus on working to close the gap between local coverage and Core Cities/England coverage.

**Breast Screening:** Data shows coverage is low compared to similar local authorities. This programme has had a particularly slow recovery from COVID-19. There are also nationally recognised workforce constraints, notably mammography but also wider radiography and radiology. IT developments/ limitations also impact the programme. The programme is projected to recover to pre-COVID-19 levels in the next year – ongoing actions will be to continue improving beyond that milestone through health promotion activities via the BSol ICB Cancer Screening and Early Diagnosis group.

**Bowel Screening:** The programme is entering the last year of the age extension roll out (both 50-year-olds and 52-year-olds will receive FIT kits in the next financial year). Local partners are working through the recently re-established BSol ICB Cancer Screening and Early Diagnosis group to increase uptake. National recruitment to FIT@80 pilot is underway and will require future planning of reduction in FIT threshold – colonoscopy capacity constraints remain. Coverage is increasing, but coverage in age extension cohorts is lower.

**Cervical Screening:** Coverage is declining across all age cohorts and is low compared to similar local authorities. Nationally, this programme has seen a long-term decline in coverage which was recognised pre-COVID-19. Increasing coverage of the programme is a key priority of regional commissioners. Actions will be complemented by the activity of the recently re-established BSol ICB Cancer Screening and Early Diagnosis group. A new call recall database was introduced in July 2024, with future programme developments to come once this has embedded. Birmingham's local sexual health service is preparing to offer opportunistic cervical cancer screening, the service is currently in the mobilisation phase of this offer.

**Diabetic Eye Screening:** The program is running smoothly with provider (current provider in place for ~2 years). Current efforts focus on increasing uptake and addressing equity issues, percentage of 'never screened' has subsequently decreased. Plans to increase intervals of screening appointments for low-risk individuals and adding OCT (optical coherence tomography) which may reduce pressure on DES. **Antenatal and Newborn Screening:** Since recent quality assurance visits at UHB sites there have been significant improvements, with most major issues addressed and governance structures enhanced – work done by the

Director of Midwifery and links into LMNS have been helpful here. Maternity services faced challenges post-pandemic but have now recovered, with staffing levels increasing and specialist roles being filled. Only community staffing continues to be impacted. Health Equity Audit is a main focus this year. Quality assurance reviews and localised pathway reviews (with SQAS) will help develop further improvements. Overall no major concerns, and performance is good.

### **NHS Immunisation Programmes**

#### **Key Points**

- Birmingham has the lowest vaccination coverage in the West Midlands for many childhood and adult vaccinations, falling below the national target of 95% for children. This low coverage poses a risk of increasing vaccine-preventable diseases.
- Birmingham faced challenges in 2023-2024, including low uptake of COVID-19, influenza and recently pertussis vaccines. The city's response to a measles outbreak in early 2024 highlighted the strain on resources and the need for immediate, coordinated action to manage the situation effectively.
- The Integrated Care System (ICS) Immunisation & Vaccination Programme Board aims to improve vaccination uptake across Birmingham by coordinating efforts among various partners. The board addresses multiple vaccination programs, including COVID-19, influenza, and childhood immunisations.

The UK national immunisation programmes aim to protect children and adults against preventable infectious diseases to reduce the risk of avoidable diseases and death. Immunisation programmes delivered in Birmingham are nationally specified, co-ordinated and commissioned locally by the NHS England West Midlands Team.

High vaccine coverage has meant that vaccine-preventable diseases rare in the UK. These diseases can become more prevalent if vaccine coverage falls as seen with the 2017 and 2023 Measles outbreaks. Vaccination coverage in Birmingham is the lowest in the West Midlands for many childhood and adult vaccinations and is below the 95% national target for all in children. Coverage falls as children get older – recent data shows that only 78% of children aged 5 have had the required two doses of the MMR vaccine (to protect against measles, mumps, and rubella).

An Integrated Care System (ICS) Immunisation & Vaccination Programme Board was established in late 2021 to tackle the uptake of influenza and Coronavirus Disease (COVID-19). In 2022 it has also included all other national vaccination programmes by bringing together partners across the immunisation system to work together to improve vaccination uptake across the city. Several sub-groups feed into the programme board, including a Childhood and Adolescent Immunisations & Vaccinations sub-group.

In response to the COVID-19 variant BA.2.86, the vaccination campaign in Birmingham and Solihull (BSol) was moved up from October to September 11, 2023, resulting in over 11,000 vaccinations by mid-September. However, by December, vaccine uptake rates were lagging behind targets, with BSol ranking low among West Midlands systems. Both COVID-19 and influenza vaccine uptake were below national targets, with low engagement among healthcare and adult social care staff. This low uptake prompted concerns about potential waning protection by January 2024, and the possibility of a spring booster campaign was raised.

By January 2024, Birmingham faced community transmission of measles, prompting discussions around declaring a major incident. The ICB was under pressure due to inadequate resources for managing the outbreak, especially for contact tracing. Plans to escalate the



situation were discussed, including seeking additional resources and coordinating with national and local partners. The timing of the national MMR catch-up campaign was deemed too late for Birmingham, highlighting the need for immediate action to allocate resources effectively. Efforts to strengthen outreach and vaccination initiatives were crucial, with plans to engage schools and headteachers through webinars.

In June and July 2024, the health system continued to grapple with various challenges, including low MMR uptake among young children, a decline in prenatal pertussis vaccinations, and ongoing efforts to improve COVID-19 and RSV vaccination rates. Although COVID-19 vaccination targets were met, concerns persisted about immunosuppressed individuals and the uptake among health and social care workers. The need for additional appointments and staff to manage RSV and prenatal vaccination campaigns was highlighted, with potential risks to other vaccination programs due to overlapping priorities. Community engagement efforts focused on addressing complacency and vaccine hesitancy to prevent future outbreaks.

### **Recommendation:**

- HWB Board should seek an assurance statement from the ICS regarding the immunisation recovery plan given the scale of the challenges of improving immunisation uptake rates.

## **Infection Prevention and Control (IPC)**

### **Health Protection MOU**

#### **Key points**

- A BSol Health Protection Memorandum of Understanding (MOU) has been produced and signed by BCC, SMBC, NHS BSol and UKHSA
- This MOU agrees a joint collaborative and co-ordinated all hazards approach to health protection incidents and plugs previously identified gaps around incident management between different agencies.
- The MOU will be reviewed bi-annually to ensure system learning continually improves Birmingham's health protection response.

The BCC Health Protection team has developed a Memorandum of Understanding (MOU) in collaboration with the BCC Environmental Health team, Solihull Metropolitan Borough Council (SMBC) Health Protection and Regulatory Services teams, UKHSA West Midlands, and Birmingham and Solihull Integrated Care Board (BSol ICB).

The purpose of the MOU is to agree on a joint collaborative and co-ordinated all hazards approach to health protection incidents, ensuring a joined-up health protection service for the Birmingham and Solihull population covering both prevention and response measures.

Although local partners have historically worked well together in responding to health protection incidents, there was no formal agreed approach explicitly outlining roles and responsibilities alongside system-wide guiding principles to incident response. This gap sometimes led to avoidable delays in incident responses, especially when identifying lead agencies to deliver on specific elements of a response. It also reduced consistency in incident responses across the patch, thereby opening up health protection risks for citizens through potentially delayed, illogical, or inconsistent responses.

## HPF ANNUAL REPORT 2023/24 DRAFT

From June 2023, lead agencies set out their roles and responsibilities in the MOU. The MOU has been agreed in principle by each of the above lead agencies. Once all formal signatures have been collected BCC and SMBC Health Protection teams will stand up the MOU review schedule, which includes a routine regular review of the document.

### Non-Communicable Diseases

### Adverse Weather Preparedness

#### **Key Points**

- Every year, adverse weather leads to excess winter deaths and excess hot weather deaths in Birmingham and across the country and internationally.
- The HPF collaborated with internal and external stakeholders to develop a local Adverse Weather Plan, ensuring alignment with existing alert systems.
- This proactive approach led to successful adverse weather plan implementation, receiving positive stakeholder feedback.
- Collaborative efforts aim to enhance weather preparedness initiatives and to potentially save lives.

The Health Protection Team develops a comprehensive Adverse Weather Plan each year, aligning with Birmingham City Council's Weather Preparedness Plan and the Met Office's alert systems. This strategy involves monitoring weather alerts, distributing messages and resources to stakeholders, including General Practitioners and community organisations, and collaborating with the Public Health Communications team to inform Birmingham residents. A new Weather-Health Alert (WHA) system, developed with the UK Health Security Agency (UKHSA) and the Met Office, was launched on June 1, 2023, enhancing preparedness for extreme weather conditions.

The HPT's implementation of the adverse weather plan has been successful, focusing on health implications of extreme weather and positively impacting vulnerable patients. Weather alerts and resources, such as UKHSA's "Beat the Heat" and "Keep Warm and Well" posters, were well-received. Social media campaigns and collaborations with various council teams extended the reach of these messages, ensuring widespread community preparedness.

Collaboration with the Emergency Preparedness and Resilience Team has been essential for refining heatwave and cold weather plans. Moving forward, the HPT aims to enhance this collaboration to improve the alerting system and support vulnerable groups more effectively. Evaluations of weather preparedness initiatives will help refine future engagement activities.

The next steps include focusing on heatwave preparedness and planning for cold weather preparedness for the upcoming winter period. Future plans include structuring this work into a formal program.

### **Environmental Hazards**

#### **Key Points:**

- The Environmental Health team at BCC investigates and enforces a wide range of statutory provisions including animal cruelty, drainage, filthy and verminous premises, unauthorised encampments and intruder alarms.
- A 90% timely response rate have been recorded for planning applications in Birmingham.

KPIs have been developed for each environmental health service to monitor service workload and response time.

BCC's Environmental Health Team ensures compliance with Health and Safety legislation through inspections and investigations of accidents and complaints in over 25,000 business in Birmingham. A Health and Safety Law Enforcement Plan is produced every year to set out the activity for the coming year.

Monitoring of development planning applications have been successful, with 2500+ consultations responded to annually. The target for timely responses (21 days of receipt of the consultation) is 85%. This KPI was developed to monitor the workloads and demands on the service and to identify any future concerns early.

The 'Statutory Nuisance and Ombudsman complaints against service' has been crucial in investigating and resolving statutory nuisances including noise, odour and light complaints.

where complaints are triaged to gather further information and tailor the investigation for the specific issues being complained of. The sports ground legislation has 6 certificated sports grounds (whole stadiums/regulated stands) and ensures all aspects of spectator safety, installations and emergency procedures.

The Pest Control service receives over 12,000 requests for assistance for rat treatments each year and whilst the team currently has vacancies priority is given to Rat enquires over work such as insects. The mortuary currently undertakes over 1600 post-mortems each year. This is an increasing number and heading towards 1800 from 1400 pre covid due to changes in legislation and increases in population.

Moving forward, the environmental health team will pay closer attention to close contact services like the beauty industry, to ensure that they are well regulated.

## Communicable Diseases

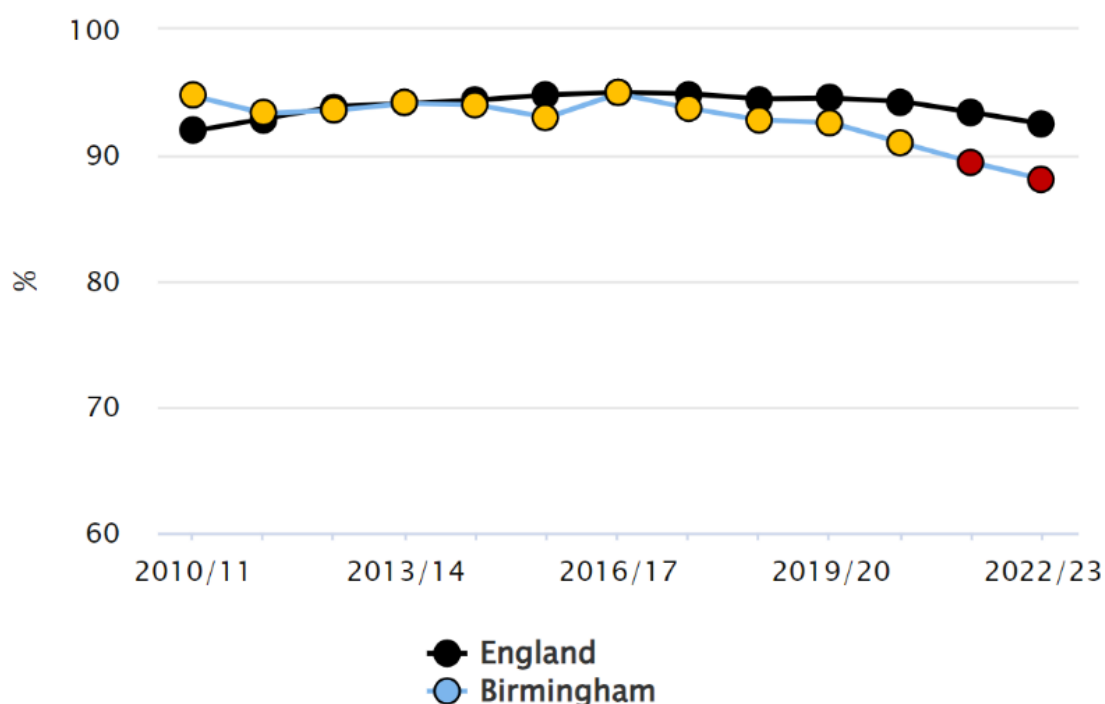
### Measles, Mumps and Rubella (MMR)/ Measles outbreak response

#### Key points

- Birmingham residents are at-risk of future measles outbreaks as city-wide uptake levels of MMR immunisation are low
- A measles outbreak was declared in the West Midlands in January 2024 by UKHSA; the majority of cases were Birmingham residents
- BSol ICS worked rapidly in partnership to deliver a comprehensive system response – with focuses on primary care, community engagement and communications
- Whole system action is needed to remove the risk of measles to Birmingham residents, by rapidly increasing the city’s MMR uptake rate.

The UK lost its measles free status in 2019, regained it in 2021 but is at risk of losing it again. ([World Health Organisation, 2024](#)). A population is protected against measles if uptake of the Measles, Mumps and Rubella (MMR) immunisation reaches 95% (([World Health Organisation, 2019](#))). However, Birmingham has had low uptake of the Measles, Mumps and Rubella (MMR) vaccine for many years. From 2010/11 to 2022/23 Birmingham did not reach this 95% target, and in recent years this uptake has been reducing ([OHID, 2023](#)). This low MMR uptake rate has meant that Birmingham citizens have been at risk of a measles outbreak for some time.

Figure 1: Population vaccination coverage: MMR1 at (5 years old)



Source: [OHID, 2023](#)

In summer 2023, measles cases started increasing in London, and UKHSA warned that London was at risk of a major outbreak. It was recognised that this posed a risk to Birmingham, as another major city in the UK with similarly low MMR uptake rates. This was discussed regularly at Birmingham’s Health Protection Forum, with members from UKHSA regularly

## HPF ANNUAL REPORT 2023/24 DRAFT

updating on regional/national measles cases and the changing risk to Birmingham, and members from NHS BSol sharing plans for potential measles cases.

In October 2023 cases started to appear in Birmingham and increased steadily over the following months. By January 2024 the outbreak of measles across the country was declared a national incident by UKHSA. Cases are linked mainly by deprivation (the majority of cases being in Index of Multiple Deprivation decile 1) and most cases were in children aged under 10 years. A summary of the system measles response is outlined in Table 1.

**Table 1: BSol Measles Response, October 2023 – April 2024**

Measles Response Activity	Work delivered
Communications	<p>Social media adverts with 417,000 impressions over 9 weeks</p> <p>170 screens across Central Birmingham with 3.5 million impressions over 6 weeks</p> <p>441 spots on Free Radio with 270,000 reach (Jan-Feb)</p> <p>432 spots on Free Radio with 364,000 reach (April-May)</p> <p>96 media appearances (including international, national and regional outlets)</p>
Community Engagement	<p>BCC-led 'Supportive Conversations' Measles and MMR training delivered to local communities – 588 attendees across 39 sessions</p> <p>Bespoke webinars delivered to key communities, e.g. Council of Faiths</p> <p>Collaboration with UKHSA to test national measles/MMR leaflets with Birmingham residents</p> <p>Community soft intelligence captured ready for thematic analysis</p>
Primary Care	<p>An additional 10,000 immunisations delivered to Birmingham residents by primary care</p> <p>Engagement with GPs through quarterly Quality Improvement Forums</p>
Education settings	<p>Immunisations delivered in schools to those most at risk of a measles outbreak</p> <p>NHS BSol-led engagement with school staff/parents at school gates</p> <p>Sharing communications and guidance on how to manage measles outbreaks in schools via School Noticeboard and Headteacher webinars</p>

Source: BCC HPT July 2024

## HPF ANNUAL REPORT 2023/24 DRAFT

As the outbreak has continued, the response shifted to more targeted and proactive engagement based on data indicating populations most at risk of a measles outbreak. This approach began with targeting schools and GP practice with MMR vaccination clinics, based on numbers of unvaccinated children and patients at those settings. An incident cell structure was established to support with continued incident response (with sub-cells dedicated to contact tracing, vaccination, community engagement, education, and communications).

The risk to Birmingham residents from measles will continue even after the end of the current outbreak unless MMR vaccination rates increase across the city. Innovative partnership working during this outbreak has been key to rapidly increasing awareness of the importance of the MMR vaccine and ultimately working to increase uptake. However, it will be essential to maintain the same urgency across the system to increase MMR uptake in the long-term. The HP Team will look to harness the current scale and pace of the measles outbreak response to continue leading work on meaningful community engagement around the MMR vaccine, and to continue working to improve vaccine uptake across all ages, to ensure Birmingham residents are protected against vaccine preventable diseases.

### **Recommendation:**

- HWB Board should seek an assurance statement from the ICS regarding the immunisation recovery plan given the scale of the challenges of improving immunisation uptake rates.

## **Tuberculosis (TB)**

### **Key Points**

- In the UK, Birmingham has the second highest rates of pulmonary Tuberculosis (TB), after London.
- Pulmonary TB is most common amongst those born in the UK compared with non-UK born people
- The highest risk factor for contracting pulmonary TB in the UK is being an asylum seeker.
- In Birmingham and other areas in the West Midlands, the 'No Recourse to Public Funds' (NRPF) TB pathway is an efficient and cost-effective tool in managing complex TB cases who have a NRPF status.

### **Tuberculosis Overview**

Tuberculosis (TB) remains a leading cause of death globally, with the World Health Organization (WHO) reporting 10.6 million new cases in 2022. Without treatment, 50% of those affected risk death. Factors complicating TB cases include HIV status, social determinants, and mental health conditions. In England, there were 5,092 TB notifications in the past year, with Birmingham reporting the highest number of cases outside London. According to ONS 2021 census and official government figures on TB notifications, TB rates in Birmingham are estimated to be nearly 3 times larger than the UK average with Birmingham having an estimated 20.8/100,000 TB rate and the national average being 7.75/100,000.

TB treatment is lengthy and requires strict adherence to medication regimes, often spanning a minimum of six months. Non-compliance can lead to increased symptom severity, greater infectiousness, and the emergence of drug-resistant strains, demanding more resources from healthcare systems.

### TB and Migrant Health

Asylum seekers are the group at highest risk for TB in the UK, closely followed by the homeless, people who use drugs, those who have spent time in detained estates and those who have suffered mental ill health. Migrants from high TB prevalence countries often have higher levels of latent TB. Asylum seekers often lack access to public funds and comprehensive health checks due to immigration control regulations, complicating TB management further.

### NRPF Pathway for TB Management

To manage complex TB cases among those with No Recourse to Public Funds (NRPF), a policy was developed in the West Midlands, involving supervised treatment in separate housing. This initiative ensures compliance through daily monitoring and has significantly improved treatment outcomes.

### Key Findings from NRPF Policy Evaluation (2024):

- Social Risk Factors: 70% of those accessing the pathway had multiple social risk factors; 35% had drug-resistant TB.
- Completion Rates: The pathway achieved a 100% treatment completion rate, compared to a 57% follow-up loss rate previously.
- Cost Savings: Significant savings were realized, with over £44,000 saved per case over six months compared to hospital stays. Savings accrued within 2.5 weeks of pathway implementation.

### Outcomes

The NRPF pathway resulted in:

- Reduced TB treatment costs
- Higher treatment completion rates
- Fewer cases lost to follow-up
- Reduced instances of interrupted or prolonged treatment
- Lower risk of drug resistance
- Improved health outcomes for patients

### Recommendations

- HWB Board members to note the complex needs of TB patients with NRPF and support the ICS via the appropriate avenues to provide a holistic approach to each patient.

## Oral Health

### Key points

- More children in Birmingham have enamel/dentinal decay than regional and national averages
- The Oral Health Improvement Network leads on evidence-based oral health improvement interventions across Birmingham and Solihull
- Future work will be informed by recommendations from an upcoming Oral Health Needs Assessment

Oral health is an integral part of general health and wellbeing. Poor oral health can affect a child's ability to sleep, eat, speak, play, and socialise. It may also result, in toothache and other related pains, causing school absenteeism and parents to take time off work to handle their children's illness. Dental extraction is the most common factor in hospital admission for under-18-year-olds in England. Individuals living in more affluent areas show considerably better oral health compared to those living in the most deprived areas.

33.7% of children surveyed in Birmingham had experience of enamel or dentinal decay, according to the National Oral Health Survey of 5-year-old children. This is higher than the regional and national average. The average number of missing (extracted due to decay) teeth among surveyed children with a history of missing teeth was 4 ([OHID, 2023](#)). Although Birmingham has a fluoridated water supply which has been attributed to relatively low levels of poor oral health given deprivation in the city ([Cotton et al., 2014](#)), these data show there are still a large amount of children in Birmingham living with poor oral health, and of those a large number experiencing severe tooth decay admitted to hospital under general anaesthetic for avoidable tooth extractions.

An Oral Health Improvement Network (OHIN) has been established to bring together relevant stakeholders, map out current work, identify gaps and draw up an action plan. The inaugural meeting took place in August 2022, with subsequent meetings focussing on preparing for an upcoming supervised toothbrushing scheme for Early Years, planning for local data collection for the National Dental Epidemiology Programme survey of 5-year-old children, and responding to recommendations from the Oral Health Needs Assessment (OHNA). Non-recurrent grants were also secured to fund several separate oral health projects for children and vulnerable adults' groups between years 2022 and 2023. The majority of funding was used to purchase toothbrush packs (containing a toothbrush, toothpaste and oral health advice leaflets) and distribute them to local communities most at-risk of poor oral health.

**Table 2 – Grant funded BCC-led oral health projects and associated activity**

Project	Activity	Details
Oral Health Promotion – Children and Vulnerable Adults	53,705 toothbrush packs purchased and distributed	Distributed in 3 phases (vulnerable adults, nurseries, school) to the following organisations: <ul style="list-style-type: none"> <li>• Year 1 &amp; Year 2 school children (All)</li> <li>• SEN school children (All primary)</li> <li>• Early years Startwell</li> <li>• Offender Hub</li> <li>• SIFA single adults' hub</li> <li>• Domestic abuse hub</li> </ul>



## HPF ANNUAL REPORT 2023/24 DRAFT

		<ul style="list-style-type: none"> <li>• Emergency provision</li> <li>• St Basils</li> <li>• Youth Hub</li> <li>• Refugee and Migrant Centre</li> <li>• Temporary Accommodation</li> </ul>
Oral Health Promotion – Foodbanks	Approximately 280,000 packs purchased and distributed	Distributed in 2 phases (West Midlands foodbanks, and Birmingham Children’s Centres/Family Hubs)
NHSE Fund 1 – Oral Health Presenters	Oral Health Presenters for nursery resources purchased	Oral Health Presenters for nursery resources used by NHS BCHC Startwell for Early Years Oral Health promotion activities
NHSE Fund 1 – Health Visitors Pilot project	1,268 toothbrush packs purchased	Toothbrush packs for distribution by Health Visiting Teams as part of innovative pilot project
NHSE Fund 1 – Oral Health Needs Assessment	Fixed-term GR4 officer recruited	Fixed term GR4 officer to be recruited to deliver agreed recommendations from Birmingham Oral Health Needs Assessment
NHSE Fund 2 – Toothbrushes for Schools EYFS (Nursery and Reception)	Approximately 36,600 toothbrush packs purchased and distributed	Distributed to all EYFS pupils in Birmingham

*Source: BCC HP Team, 2024*

Birmingham residents are experiencing challenges when attempting to access dental care, reflecting issues with access to dental services reported regionally and nationally ([Healthwatch Birmingham, 2023](#)). It is therefore extremely important to ensure all residents have the right knowledge and capability to take the recommended preventative measures to ensure good oral health. BCC-led toothbrush distribution initiatives have supported with this ambition, encouraging regular toothbrushing habits and providing quick information to upskill adults and children. The publication of the Oral Health Needs Assessment (anticipated Autumn 2024) will inform recommendations to best improve, maintain and protect the oral health of Birmingham residents. BCC HP team will conduct evaluations of previous oral health activity, to help inform actions to meet those recommendations. The team will also continue working with and supporting the activity of the NHS BCHC Oral Health Improvement team, and ensure future activity is evidence-based and directly responding to the needs of local citizens.

### **Food Safety and Hygiene**

#### **Key Points**

- The Food Standards Agency (FSA) estimates that food poisoning costs the UK £9 billion annually of which £ billion is a result of unknown causes.
- Food borne infections are a major burden in Birmingham with over 4500 food related incidents reported in a 4-year period, a figure that likely under-estimates the true numbers of food related illness in the city
- Awareness and understanding of food hygiene rating and the scheme itself are essential to improving food hygiene compliance within Birmingham.

The Birmingham Food Strategy, launched in late 2023, aims to create a sustainable and healthy food system in the city to enhance residents' health. A key focus is on food safety and standards, managed by the HPT in partnership with other BCC. From January 2019 to November 2023, 4543 cases of food poisoning were reported in Birmingham, likely an underestimate. Nationally, the Food Standards Agency (FSA) estimates 2.4 million annual cases of foodborne illness, costing the UK £9 billion, with Birmingham's share in the tens of millions.

The HPT, along with the Environmental Health Team, identified wards with high concentrations of non-compliant food businesses. In this report, a non-compliant business refers to businesses that are rated between 0 and 2, with 2 meaning improvement necessary and 0 meaning urgent improvement necessary. The wards include Soho & Jewellery Quarter, Ladywood, Nechells, Alum Rock, Ward End, Bordesley, and Highgate. These areas, marked by high deprivation and low home cooking rates, face negative health outcomes.

An FSA survey in 2021 revealed 89% awareness of the Food Hygiene Rating Scheme, but only 43% considered it when choosing takeaways. Efforts to improve food hygiene understanding include the Healthy School Programme and developing training resources for non-compliant businesses. Inspections in non-compliant businesses showed a lack of safety culture. Some restaurants were found to not provide sufficient training and in some cases reliance on different languages among staff was also noted. To address this, the HPT recommends creating easy-to-understand, multilingual training resources to overcome cultural and language barriers, thereby enhancing food safety standards citywide.

### **Communications**

#### **Key points**

- The Health Protection Team (HPT) collaborates with stakeholders to ensure timely and accurate information sharing, as demonstrated during the measles outbreak response and hot weather preparedness efforts.
- HPT hosts webinars and partners with local advocates to promote health protection messages, including Black History and LGBT Month and the 'Bolder Healthier Champions' program.
- HPT recommends continued coordinated efforts and face-to-face interactions during urgent incidents and the creation of an annual communications calendar for effective outreach.

## HPF ANNUAL REPORT 2023/24 DRAFT

The Health Protection Team (HPT) prioritises effective communication with partners, stakeholders, and communities to ensure accurate and timely information sharing. This was crucial during the measles outbreak, where HPT engaged schools and community partners to amplify messages. Continuous communication efforts, including hot weather preparedness sessions with Chinese and faith community groups, uphold standards and educate the public.

HPT hosted webinars during Black History and LGBT Month to address health inequalities, focusing on vaccination rates and access to health services. Collaborating with the Addictions team, they emphasized health protection and addiction issues. Additionally, HPT worked with the 'Bolder Healthier Champions' program, empowering local advocates to promote screening and immunization programs within their communities, addressing mistrust in authorities.

HPT's engagement with diverse communities highlighted the need for coordinated efforts and effective in-person interactions. Future operations will blend face-to-face and digital communications to maximize impact.

The HPT is currently compiling information from engagement during the measles outbreak into a qualitative report. This report aims to support future initiatives targeting deprived and vulnerable communities to reduce health inequalities in Birmingham. Additionally, a comprehensive year-long communications schedule is being developed to help the HPT track communication needs and provide timely support when necessary.

### Conclusion

In the last year there has been much work across various health protection workstreams. There has been significant outreach work done including engagement with schools, early years institutions and various under-served communities. This includes sending out tailored communicable disease guidance and communications to schools, early years and educational institutions regarding measles and carrying out oral health promotional activities with schools. This work has allowed for the building of relationships with schools and educational institutions to improve engagement and partnership work across Birmingham.

The establishment of multi-agency groups has allowed for cross-system and collaborative work to develop solutions and start work to improve health protection within the city. This partnership work during the 2023/24 measles outbreak in Birmingham.

In the coming year, there will be a focus on developing approaches to work collaboratively across the network and engage with under-served communities to improve health outcomes and work to reduce health inequalities in these communities. The upscaling of public health intelligence and evidence to provide a representative view of the Birmingham child population and the identification of gaps within and across the system will aid in moving forward in the right direction.

## Glossary

Acronym	Term
BCC	Birmingham City Council
BSol	Birmingham and Solihull
COVID-19	Coronavirus Disease
DPH	Director of Public Health
EH	Environmental Health
FTC+	Fast Track Cities Plus
HPT	Health Protection Team
HPF	Health Protection Forum
ICB	Integrated Care Board
ICS	Integrated Care Systems
MMR	Measles, Mumps and Rubella
MOU	Memorandum of Understanding
NHS	National Health Service
TB	Tuberculosis
UKHSA	UK Health Security Agency

## Contributors

Birmingham City Council Public Health - Health Protection Team

- Dr Mary Orhewere
- Funmi Worrell
- Helen Bissett
- Paulius Armanavicius
- Manuela Engelbert
- Onome Etim

## Partners

BCC Environment Health team, BCC Resilience team,  
 ICB partners: IPC team, ICB immunisation and vaccination team,  
 UKHSA – West Midlands team.