Birmingham Health and Wellbeing Board

| | Agenda Item: 7 |
|---|---|
| **Report to:** | **Birmingham Health & Wellbeing Board** |
| **Date:** | **30th September 2015** |
| **TITLE:** | **BIRMINGHAM HEALTH PROTECTION FORUM ANNUAL REPORT 2014/15** |
| **Organisation** | **Birmingham Public Health** |
| **Presenting Officer** | **Dr Adrian Phillips/Mr Chris Baggott** |

| **Report Type:** | **Endorsement** |
|---|---|

**1. Purpose:**

To seek endorsement from the Board of the Health Protection Assurance Statement made by the Director of Public Health, and the annual Health Protection Report

**2. Implications:**

| | | |
|---|---|---|
| BHWB Strategy Priorities | Child Health | Y |
| | Vulnerable People | Y |
| | Systems Resilience | Y |
| Joint Strategic Needs Assessment | | |
| Joint Commissioning and Service Integration | | |
| Maximising transfer of Public Health functions | | |
| Financial | | |
| Patient and Public Involvement | | |
| Early Intervention | | |
| Prevention | | Y |

**3. Recommendations**

The Health & Wellbeing Boards is recommended to;

3.1 Endorse the annual report of the Health Protection Forum (HPF) attached as **Appendix A**.

3.2 Accept the assurance statement from the Director of Public Health that

plans are in place or are being developed to protect the health of the population of Birmingham

3.3 Endorse the major issues of Health Protection identified for 2014/15, and for 2015/16 in the report and identify any additional concerns or contributions it can make.

## 4. Background

4.1 The health protection duty of local authorities (Health and Social Care Act 2012, section 6C) focus principally on arrangements for preventing and planning responses to health protection incidents and communicable disease outbreaks that do not require a multi-agency response.

4.2 The Health Protection Forum in Birmingham is chaired by the Director of Public Health and provides the space and time for the exchange of information necessary to ensure that all partners in the delivery of health within Birmingham are acting jointly to provide comprehensive services covering all aspects of Health Protection; and to evidence this to the satisfaction of the Director of Public Health.

4.3 The Health Protection Forum receives regular updates and reports from key partners involved in the five areas of Health Protection:

a. Communicable Diseases

b. Non-Communicable Diseases

c. Screening and Immunisations

d. Emergency Planning, Resilience and Response

e. Infection Prevention and Control

4.4 This annual report provides a review of the most significant issues within the five areas; updates on previously identified priorities, details on new issues, and any potential future challenges.

4.5 The three issues that have been identified as priorities for HPF over the last year have been:

- Addressing the high rates of Tuberculosis in Birmingham, and responding to issues raised by non-compliant patients.
- Reviewing and addressing lessons learned from health protection incidents.
- Ensuring that during and following organisational changes, the health protection roles of all stakeholders are clear and result in effective

health protection planning.

4.6 The Health Protection Forum facilitates the mandatory function of the Director of Public Health to assure himself that plans are in place to protect the health of the Birmingham population. This report notifies the Health and Wellbeing Board of the Director of Public Health's assurance that appropriate plans are in place. Where gaps in planning, or the need for new plans are identified, the Director of Public Health is confident that the Health Protection Forum facilitates their development.

## 5. Compliance Issues

### *5.1 Strategy Implications*

This report fulfils one of the mandatory functions of Public Health in the Local Authority; the duty to ensure that there are plans in place to protect the health of the population.

Some aspects of the Health Protection work considered by the Health Protection Forum in Birmingham contribute to outcomes under the System Resilience section of the Strategy: common NHS and LA approaches; improve primary care management of common and chronic conditions.

### *5.2 Governance & Delivery*

The report and decisions and comments from the Board will determine the work programme of the Health Protection Forum for 2015/16, and the governance of the Forum.

It is proposed that the HPF will continue to report annually to the Board. Day to day progress is managed by the formal meetings of the HPF and by the Director of Public Health between meetings.

### *5.3 Management Responsibility*

The Director of Public Health is accountable for the delivery of an effective Health Protection Forum; and is supported by Chris Baggott (Public Health lead for assurance) and the members of the Forum.

## 6. Risk Analysis

| Identified Risk | Likelihood | Impact | Actions to Manage Risk |
|---|---|---|---|
| Board doesn't endorse the assurance statement of the director of Public Health | Low | Low | Clear statement of assurance in the annual report. DPH will still be accountable for being legally assured on Health Protection matters |

| Appendices |
| --- |
| Appendix A - Health Protection Forum Annual Report to the Birmingham Health and Wellbeing Board |

| Signatures | |
| --- | --- |
| **Chair of Health & Wellbeing Board (Councillor Paulette Hamilton)** | P. A Hamilton |
| **Date:** | 18/09/2015 |

The following people have been involved in the preparation of this board paper:

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# Health Protection Forum Annual Report for 2014/15 to the Birmingham Health and Wellbeing Board

## Contents

## 1. Assurance Statement

The Health Protection Forum facilitates the mandatory function of the Director of Public Health to assure himself that plans are in place to protect the health of the Birmingham population. This report notifies the Health and Wellbeing Board of the Director of Public Health's assurance that appropriate plans are in place. Where gaps in planning, or the need for new plans are identified, the Director of Public Health is confident that the Health Protection Forum facilitates their development.

## 2. Summary

This annual report on the work of the Birmingham Health Protection Forum (HPF) summarises the main areas of work that were identified as priorities for the forum in 2014/15.

The Public Health Outcomes Framework includes health protection indicators and these are shown in Figure 1.

The three issues identified as priorities for the HPF over in 2014/15 were:

- Addressing the high rates of Tuberculosis in Birmingham, and responding to issues raised by non-compliant patients
- Reviewing health protection incidents
- Ensuring that during and following organisational changes, the health protection roles of all stakeholders are clear and result in effective health protection planning

For The HPF will continue to address the above priorities in 2015/16, and has identified three new priorities:

- Identifying lessons learned from health protection incidents and ensuring they are addressed in action plans
- Improving the uptake rates of routine childhood vaccinations
- Addressing air quality as a public health issue and supporting improvement plans

## 3. Introduction

The health protection duties of local authorities (Health and Social Care Act 2012, section 6C) focus principally on arrangements for preventing and planning response to health protection incidents and communicable disease outbreaks that do not require a multi-agency response.

The Health Protection Forum in Birmingham is chaired by the Director of Public Health and meets bi-monthly. The Forum provides the space and time for the exchange of information necessary to ensure that all partners in the delivery of health within Birmingham are acting jointly to provide comprehensive services covering all aspects of Health Protection; and to evidence this to the satisfaction of the Director of Public Health, the Health and Wellbeing Board and the City Council.

The Health Protection Forum has defined five areas of health protection and it receives regular updates and reports from key partners involved in the areas of health protection listed below. This annual report provides a review of the most significant issues within the five areas; updates on priorities identified in the 2014 report, details on newly-emerged issues, and any potential future challenges.

HPF defined areas of health protection:

a. Communicable Diseases
b. Non-Communicable Diseases
c. Screening and Immunisations
d. Emergency Planning, Resilience and Response
e. Infection Prevention and Control

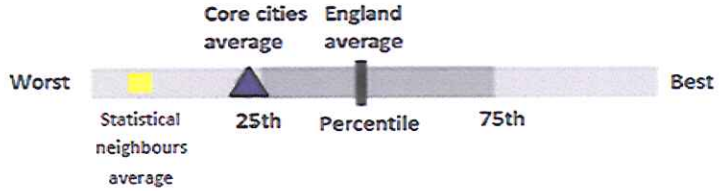
## Figure 1. Health Protection Indicator Spine Chart (May 2015)

# Birmingham Public Health Outcomes Framework May 2015

**Key:**

- Significantly Better than England average
- Not significantly different from England average
- Significantly Worse than England average
- No significance can be calculated
- Significantly Lower than England average
- Significantly Higher than England average

No Polarity




| Domain | Indicator | B'ham Number | B'ham Stat | Eng Avg | Eng Worst | England Range | Eng Best | Core cities average | Statistical neighbours average |
|---|---|---|---|---|---|---|---|---|---|
| Health Protection | 3.01 - Fraction of mortality attributable to particulate air pollution (2012) | n/a | 5.7 | 5.1 | 7.7 | | 3.0 | 5.0 | 5.8 |
| | 3.02 - Chlamydia detection rate (15-24 year olds) - CTAD (Males) (2013) | 1,322 | 1505.3 | 1387.5 | 599.4 | | 4262.0 | 1568.4 | 1472.7 |
| | 3.02 - Chlamydia detection rate (15-24 year olds) - CTAD (Females) (2013) | 2,480 | 2785.2 | 2633.5 | 1093.7 | | 6358.2 | 2961.1 | 2849.3 |
| | 3.02 - Chlamydia detection rate (15-24 year olds) - CTAD (Persons) (2013) | 3,832 | 2166.6 | 2015.6 | 840.0 | | 5758.5 | 2272.9 | 2163.7 |
| | 3.03iii - Population vaccination coverage - Dtap / IPV / Hib (1 year old) (2013/14) | 16,131 | 91.5 | 94.3 | 78.6 | | 98.4 | 94.2 | 93.7 |
| | 3.03iii - Population vaccination coverage - Dtap / IPV / Hib (2 years old) (2013/14) | 16,213 | 93.1 | 96.1 | 81.6 | | 99.1 | 95.9 | 95.9 |
| | 3.03iv - Population vaccination coverage - MenC (2012/13) | 15,288 | 88.0 | 93.9 | 75.9 | | 98.8 | 92.4 | 93.6 |
| | 3.03ix - Population vaccination coverage - MMR for one dose (5 years old) (2013/14) | 15,123 | 94.1 | 94.1 | 74.8 | | 98.6 | 94.8 | 93.5 |
| | 3.03v - Population vaccination coverage - PCV (2013/14) | 16,077 | 91.2 | 94.1 | 78.2 | | 98.3 | 93.7 | 92.8 |
| | 3.03vi - Population vaccination coverage - Hib / Men C booster (5 years) (2013/14) | 14,661 | 91.3 | 91.9 | 72.7 | | 98.1 | 92.2 | 89.7 |
| | 3.03vi - Population vaccination coverage - Hib / MenC booster (2 years old) (2013/14) | 14,996 | 86.2 | 92.5 | 76.6 | | 98.1 | 91.4 | 92.0 |
| | 3.03vii - Population vaccination coverage - PCV booster (2013/14) | 15,472 | 88.9 | 92.4 | 76.4 | | 98.5 | 92.0 | 91.6 |
| | 3.03viii - Population vaccination coverage - MMR for one dose (2 years old) (2013/14) | 15,365 | 88.3 | 92.7 | 78.3 | | 98.3 | 91.9 | 92.2 |
| | 3.03x - Population vaccination coverage - MMR for two doses (5 years old) (2013/14) | 13,537 | 84.3 | 88.3 | 63.8 | | 97.4 | 88.0 | 87.7 |
| | 3.03xii - Population vaccination coverage - HPV (2013/14) | 5,637 | 87.9 | 86.7 | 51.1 | | 96.6 | 87.3 | 85.7 |
| | 3.03xiii - Population vaccination coverage - PPV (2013/14) | 95,018 | 65.2 | 68.9 | 52.8 | | 77.6 | 69.6 | 67.2 |
| | 3.03xiv - Population vaccination coverage - Flu (aged 65+) (2013/14) | 112,270 | 71.1 | 73.2 | 62.9 | | 80.5 | 74.7 | 71.0 |
| | 3.03xv - Population vaccination coverage - Flu (at risk individuals) (2013/14) | 66,019 | 50.6 | 52.3 | 38.9 | | 68.6 | 52.8 | 52.0 |
| | 3.04 - People presenting with HIV at a late stage of infection (2011 - 13) | 156 | 48.3 | 45.0 | 77.3 | | 25.9 | 49.2 | 56.0 |
| | 3.05i - Treatment completion for TB (2012) | 340 | 85.9 | 83.3 | 40.7 | | 100.0 | 83.2 | 84.9 |
| | 3.05ii - Incidence of TB (2011 - 13) | 1,238 | 38.1 | 14.8 | 113.7 | | 0.5 | 21.3 | 36.0 |
| | 3.06 - NHS organisations with a board approved sustainable development management plan (2013/14) | 7 | 53.8 | 41.6 | 0.0 | | 83.3 | 42.6 | 39.4 |
| | 3.07 - Comprehensive, agreed inter-agency plans for responding to health protection incidents and emergencies (201 | n/a | 100.0 | 95.2 | 0.0 | | 100.0 | 100.0 | 100.0 |

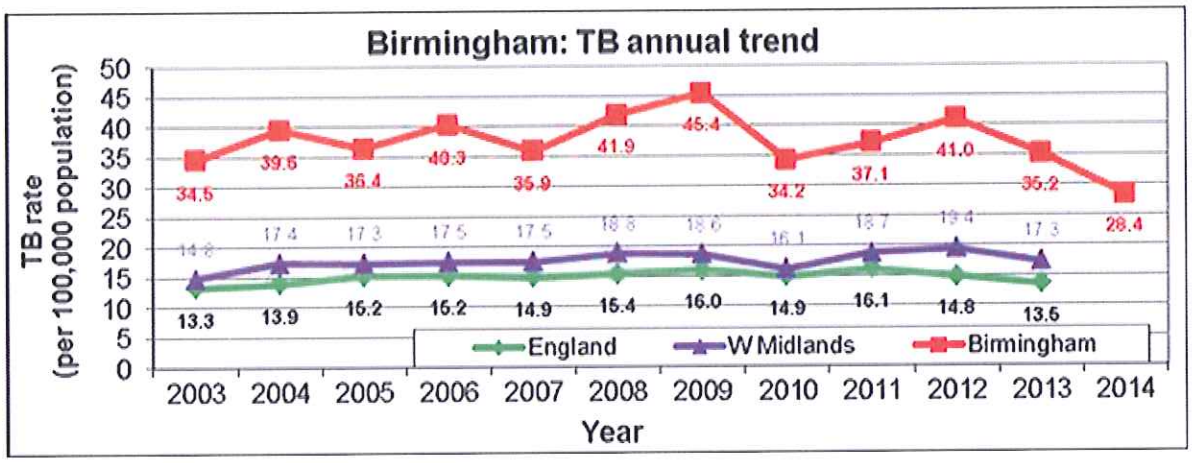
Note :-
1. For indicator 3.02 (ie Chlamydia rates - persons) the classification used is :- < 1,900 | 1,900 to 2,300 | >= 2,300
   For indicator 3.02 (ie Chlamydia rates) for Males and Females there are no current thresholds recorded on the fingertips website so these are currently imputed as "no significance can be calculated".
2. For indicator 3.02i (ie Chlamydia diagnoses - persons) the classification used is :- < 2,000 | 2,000 to 2,400 | >= 2,400
3. For indicator 3.02ii (ie Chlamydia diagnoses - persons) the classification used is :- < 1,900 | 1,900 to 2,300 | >= 2,300
4. For indicators 3.03iii to 3.03x (ie Population vaccination coverage) the classification used is :- < 90% | >= 90%
5. For indicators 3.03xii and 3.03xiii (ie Population vaccination coverage HPV/PPV), the classification used is :- < previous year's England value | >= previous year's England value
6. For indicators 3.03xiv and 3.03xv (ie Population vaccination coverage Flu), the classification used is :- < 75% | >= 75%
7. For indicator 3.04 (ie HIV at a late stage of infection) the classification used is :- < 25% | 25% to 50% | >= 50%
8. For indicator 3.05i (ie Treatment completion for TB) the classification used is :- < 85% | >= 85%

# 4. Communicable Disease

## 4.1. Tuberculosis

Birmingham has recently had a high incidence of tuberculosis (TB), with rates around 40/100,000 (Figure 1), the level used to define high incidence areas. TB is therefore one of the main issues of Health Protection concern for the Forum. TB incidence decreased for the second consecutive year in Birmingham with the total number of cases decreasing in 2014 to 312 (TB incidence 28.4 per 100,000 population), from 385 the previous year and 445 in 2012.

**Figure 1. Annual TB rates for Birmingham, West Midlands, England**




### 4.1.1. Progress against previous priorities

#### 4.1.1.1. Clinical Leadership

In 2014/15 there was successful recruitment to the posts of clinical lead and paediatric lead. Cross-city multi-disciplinary team meetings have now been established where clinical teams from the three hospital treatment centres engage in discussion of complex cases. This has also strengthened the clinical leadership in support of the TB control programme.

#### 4.1.1.2. Treatment Completion for Active and Latent TB

Completion of TB treatment is essential for effective control and the Chief Medical Officer has set a target of 85% treatment completion rates. The proportion of cases of active TB disease who complete treatment was already >85% in Birmingham and has increased further to 93-94% (Quarter 1-4, 2013). Treatment completion rates for latent TB infection have also been excellent with rates of 95-98% for the four quarters in 2013. Assessment and delivery of directly observed treatment (DOT) has improved for patients less likely to complete TB treatment with 97-100% of TB patients risk assessed for DOT and 92-99% of patients assessed as eligible being offered the service. The TB Service also offers Enhanced Case Management and DOT to Latent cases following assessment.

Significant service improvements have been made as a direct result of quarterly TB cohort review meetings which are now well established in Birmingham. These improvements include a considerable increase in the proportion of cases seen by the TB Service within two weeks; improved HIV testing; ensuring TB specialist medical input for all patients, especially with regard to paediatric patients; a system established for review of deaths; investigation of diagnostic delays among hospitalised cases; and feedback to GPs about delayed referrals.

#### 4.1.1.3. Detection and Management of Latent TB Infection

Approximately 70% of TB cases occur in people born abroad of whom around 45% entered the UK within five years of diagnosis. Therefore establishing a robust system to detect and treat latent infections in migrants from high incidence countries, a priority identified in the recently published national TB strategy, should be an important part of the programme to control TB in Birmingham. A pilot was successfully completed to test and treat college ESOL (English for Speakers of Other Languages) students. More than 450 students, most from high incidence countries, were tested and over 65 cases of latent infection and 2 cases of active infection identified.

#### 4.1.1.4. Effective and Integrated Commissioning of TB Services

Senior representation of commissioners on the TB Programme Board has been established. The clinical and nursing leads and senior clinicians have visited other services nationally (Manchester) and internationally (Netherlands and Spain) as a benchmark for comparison of local services.

### 4.1.2. New Priorities

#### 4.1.2.1. Contact Tracing and Management

TB Cohort Reviews have consistently demonstrated the need to strengthen identification of social contacts of cases of infectious TB and uptake of screening among those identified. Priorities identified by the TB network include redesigning services to include TB screening of contacts in domestic settings similar to the Spanish/Barcelona model, and developing a business case for expansion of the community TB service to include recruitment of community health care workers to provide enhanced support for particular ethnic minority communities.

The nursing service is auditing which stages of treatment contacts drop out in order to develop strategies to reduce this.

#### 4.1.2.2. New Entrant Screening

A key component of the national strategy for high incidence areas such as a Birmingham is for the implementation of screening for latent infections among migrants from high incidence countries. Intense collaboration will be required with local partners (NHS, CCGs, PHE, Local Authority Public Health and third sector), the West Midlands TB Control Board, and the national TB Strategy Implementation team to implement screening in this financial year.

#### 4.1.2.3. 'One-Stop-Shop'

To improve access to treatment services for people from hard to reach communities an open door one stop service based at Birmingham Chest Clinic / Heartlands Hospital is being developed. Also the TB nursing team have begun assessing patients attending other services e.g. sexual health to increase access reduce inconvenience to patients.

### 4.1.3. Challenges

#### 4.1.3.1. Poorly Adherent Patients

There is a lack of appropriate facilities in the UK for treatment of poorly adherent (and drug-resistant) cases that present a risk to public health, with the resulting risk of increasing spread of (drug resistant) infections. There is also a need for coordinated multi-agency public health strategy to manage local patients with (drug resistant) TB who have complex social needs.

#### 4.1.3.2. National Strategy Implementation

Significant funding for new entrant screening will be available for 2015/16, but there have been delays to publication of the national strategy, establishment of structures to support its implementation and consequently release of the funds. There is a significant risk that due to the limited time available for implementing the new Board, adequate numbers of migrants will not be screened and consequently a danger to making the case for continued funding of the service beyond 2016. To mitigate against this Birmingham TB Service is planning to repeat ESOL screening in 15/16.

## 4.2. Blood-Borne Virus Infections (Hepatitis B and C, HIV)

Hepatitis B (HBV) and C (HCV) virus infections remain important public health problems that predominately affect marginalised groups of society, including People Who Inject Drugs (PWIDs) and minority ethnic groups.

In Birmingham it is estimated that only approximately 40% of HCV infected individuals are diagnosed so public health promotion and awareness-raising for the public and GPs are ongoing.

### 4.2.1. Progress against previous priorities

Health promotion activities for the public have taken place and awareness raising among GPs is ongoing with the recent roll-out of an e-learning module.

The newly commissioned sexual health and substance misuse services will risk assess and offer appropriate screening and testing to all service users, followed by referrals into treatment service if required.

HIV prevalence in Birmingham is above the 2/1000 threshold at which HIV testing in medical admissions and primary care registrations in adults is recommended. Progress is being made to implement this testing as part of the mobilisation of the newly commissioned sexual health service for Birmingham.

## 4.3. Ebola

Ebola is a rare but serious disease caused by Ebola virus. Since March 2014, there has been a large outbreak affecting Guinea, Liberia and Sierra Leone. Following significant in-country support to manage the outbreak, the situation is now improving. As part of the national Ebola response, Public Health England has been working with Government, NHS colleagues; Airport Authorities, UK Border Force and Local Authority partners to ensure the UK remained alert to, and prepared for, the risk of Ebola.

### 4.3.1. Screening

Preparedness has been essential to protect public health and one measure included targeted passenger screening at the UK's main ports of entry, including Birmingham Airport.

Screening commenced at Birmingham Airport on 31st October 2014. With no direct flights from West Africa to the UK, the dominant traffic routes to Birmingham are from the European hubs of Brussels, Charles de Gaulle and Amsterdam.

Passengers of concern were screened and categorised by level of risk, identified as having partaken in hazardous activity such as attending a funeral or having direct contact with bodily fluids and / or describing symptoms of pyrexia (temperature of ≥37.5C) or those clinically compatible with Ebola infection. Possible cases were risk assessed by discussion with the Imported Fever Service.

Screening involved clinical assessment by taking the passengers temperature using a tympanic thermometer and completing a health assessment form.

As of 11/5/2015, 178 at risk passengers have been screened at Birmingham Airport out of which 1 was referred to NHS as the passenger was symptomatic on arrival, 1 was a Category 3 passenger and 1 was a Category 2 passenger.

### 4.3.2. Challenges

The successful delivery of the screening programme was not without its challenges as a project of this nature had never been tackled before by PHE or the team. Key challenges faced and successfully overcome were:

- From across the West Midlands PHE Centre a body of over 100 volunteers were recruited and trained to carry out the screening task. A comprehensive operational plan was drafted and continuously updated to assist screeners in all aspects of their role, ranging from finding their way to and around the airport to an assessment algorithm and action card in the event of identifying a passenger requiring NHS care.
- The operational delivery arrangements for screening were developed with partners within a dynamic commercial environment. A well-regarded Health Protection Plan

for the Airport set the foundations for partner engagement through a common vision.

- Maintaining effective two way local to national communication was key. There was also a need to ensure effective operational management across all ports and this combined with considerable interest at the senior levels of government, required the timely and accurate passage of information. Material was regularly provided for public communication releases.
- At the same time as resourcing the screening process, communication at managerial level was essential in agreeing key priorities and sharing of limited resources across all parts of the organisational to maintain business as usual v staffing a Level 4 emergency.

### 4.3.3. Lessons Learned

Delivery of health protection measures relied on a whole system approach, rather than a medical model, with some elements being delivered by partners not usually recognised for their public health role.

Operating in a commercial environment required sensitivity to the local pressures and drivers. Strong leadership held the key to negotiation in order to develop a compatible implementation strategy.

The team were able to draw on previous relationships forged when the Health Protection Plan for the Airport was drafted in 2013 which detailed guidance on the management of a range of potential health scenarios.

Other keys to success were sharing learning between ports and identifying a range of contingencies to ensure a proportionate response to a dynamic situation.

Teamwork was essential; both within the Steering Group, between all volunteers and with staff holding the fort back at base. Trust within the relationships supported individuals to step outside of comfort zones and take informed risks.

# 5. Non-communicable Disease

Non-communicable diseases include cardiovascular disease, diabetes, cancer, chronic respiratory diseases and renal disease. Many non-communicable diseases can result from individual behavioural risk factors like smoking, alcohol, poor diet, and risk factors that are amenable on a local or national scale such as air quality or vaccination and screening programmes. Many non-communicable diseases are therefore preventable.

Birmingham Public Health and City Council officers in the Regulation and Enforcement Division (including Environmental health, Trading Standards and Licensing) lead on services and projects with outcomes contributing to reduced impacts of NCDs on health outcomes.

## 5.1. Air Quality

The poor air quality in Birmingham was identified as a priority in last year's report, and the evidence base about it's impact on health outcomes is increasing.

### 5.1.1. Nitrogen Dioxide

The primary focus for air quality regulation remains the need to reduce concentrations of nitrogen dioxide in order to meet the levels stated within the Ambient Air Quality Directive (DIR2008/50/EC).

The EC is progressing infraction proceedings against the UK Government for continued breaches of the emissions limit for nitrogen dioxide. The West Midlands remains one of 16 regions in the UK to be in breach. The Government has reminded local councils that under the reserve powers of the Localism Act there exists the option for Government to transfer fines down to councils who are deemed to be insufficiently tackling the problem.

The main areas of concern for Birmingham remain the city centre and the M6 / A38(M) corridors.

The primary source of nitrogen dioxide emissions within Birmingham is from the exhaust emissions of motor vehicles, specifically from diesel powered engines.

### 5.1.2. Particulate Matter

The increase in mortality risk associated with long-term exposure to particulate air pollution is one of the most important, and best-characterised, effects of air pollution on health. In April 2014 Public Health England published a study assessing the local mortality burdens associated with particulate air pollution. This study estimated that 6.4% of all deaths in Birmingham within the over 25 age group could be attributable to anthropogenic particulate air pollution, accounting for 520 deaths and 5707 associated life-years lost per annum (based on 2010).

The primary source of anthropogenic particulate air pollution at the lower fractions (particles of 2.5 microns or lower) is from the exhaust emissions of motor vehicles, specifically from diesel powered engines, and from localised solid fuel burning e.g. biomass.

Particulate air pollution retains a high focus due to the heightened knowledge base around the health impacts arising, although the Local Authority does not have direct legislative responsibility for PM2.5 emissions. The Local Air Quality Management regime is however under review and it is anticipated that Government will insert a requirement for local councils to have regard to PM2.5 emissions when undertaking their statutory air quality function to support the national objective.

### 5.1.3. Primary City Council Interventions

- Atmospheric emissions from 236 local industrial facilities are regulated.
- Air quality across the city is monitored using 6 real time monitoring stations and an extensive network of nitrogen dioxide tubes (including assessing the impact from the 20mph trial areas).
- The City Council is leading on a study to assess the feasibility of deploying low emission zones to tackle the city centre nitrogen dioxide problems, with a preliminary report confirming diesel vehicles as the primary source. The project is expected to complete mid-2015.
- A low emission zone (LEZ) implementation trial is set to commence early spring utilising cameras to assess the types and ages of vehicles entering the city via key routes with a view to informing whether a LEZ is necessary and, if so, what form it should take.
- The Birmingham Mobility Action Plan which seeks to provide the future vision for transportation within the city acknowledges the issues around air quality and seeks to incorporate this problem into the solution.

## 5.2. Joint working

A joint role between Public Health and Regulation & Enforcement is facilitating a more strategic approach to both alcohol and tobacco control within the City, as well as closer working across other functions within the teams.

The Tobacco Control Alliance has been re-started to provide a multi-disciplinary approach to one of the biggest influences on health outcomes.

## 5.3. Infection control (Environmental Health)

The Environmental Health Officers (EHOs) play a pivotal role in infection prevention and outbreak investigations; liaising with Public Health England (PHE).

A review of capacity and policies is ongoing to inform the HPF about any areas of concern in this essential health protection function.

# 6. Screening and Immunisation

All of the immunisation and screening programmes delivered in Birmingham are nationally specified and coordinated locally by a Public Health England team embedded in the NHS England West Midlands team. Updates are routinely reported to the Health Protection Forum on all of the screening and immunisation programmes delivered in Birmingham.

## 6.1. Screening Programmes

There are a total of 14 screening programmes in England across the life course. The progress, issues and challenges for selected programmes are detailed below.

### 6.1.1. Breast Cancer Screening

Breast Cancer Screening Programme coverage for Birmingham has increased from 70.4% in 2013 to 70.7% in 2014. Initiatives are being developed in Birmingham to continue the improvement in uptake.

The Screening and Immunisation team is working with the West Midlands Quality Assurance Reference Centre (QARC) and West Midlands Breast Screening and Clinical Genetics Services to develop a High Risk Breast Screening Pathway, in accordance with the NICE guidelines and NHS Breast Screening Programme service specification. The new service will offer eligible women at High Risk of Breast Cancer same day MRI and/or Mammography screening and assessment at a specialist High Risk Screening Service, with referrals being managed by their local Breast Screening Service. Breast Screening Services are now accepting referrals of newly diagnosed eligible women from the West Midlands Clinical Genetics Service.

### 6.1.2. Bowel Cancer Screening

This screening programme has a strong evidence base, but we have low uptake rates in Birmingham.

Improvements in uptake have been observed during 2014/15, but uptake across Birmingham varies considerably and the range of CCG level uptake reflects this. The West Birmingham area is a particular focus for the team with uptake in Sandwell and West Birmingham CCG lower but positivity higher than neighbouring CCG's. Reducing variation in uptake and improving overall uptake for Birmingham to above the 52% minimum standard remains a priority in the year ahead. Analysis of uptake and work to identify barriers to uptake in all areas is being undertaken.

As Bowel Scope Screening is implemented using a phased approach by provider Trusts and Faecal Immunochemical Testing is piloted by the Bowel Cancer Screening Programme, the Screening and Immunisation team will be working closely with screening providers to target poor uptake areas and reduce variation in uptake across Birmingham.

## 6.2. Immunisation Programmes

Through the life course, the Birmingham population are offered 17 routine vaccinations, protecting against 12 infectious diseases. In addition to this girls are also offered 3 HPV vaccinations at 12-13 years of age. There are an additional four vaccinations offered to at risk groups. The main challenges for the immunisation programmes are detailed below.

### 6.2.1. 0-5 year old Immunisations

Uptake for 0-5 Immunisations has improved since the Screening and Immunisation team has started working closely with Birmingham Child Health Records Department on improving data validation from GP vaccination records. Despite improvements there is still further work to be done to improve uptake to a level where national standards are being met. Improving uptake for these vaccination programmes is a priority for the Screening and Immunisation team and this is reflected in our planning with NHS England for 2015/16.

The uptake rates for the Meningitis C, Hib/Meningitis C and MMR vaccinations are significantly lower than the England average and the HPF will focus on improving the rates in Birmingham in 2015/16.

As data validation and accuracy improves the Screening and Immunisation team plans to undertake work with GP Practices and their respective CCG's to reduce variation in 0-5 immunisation uptake and improve uptake overall, reducing the risk of infectious disease within Birmingham's children.

The national Child Health Information System (CHIS) review has been a major undertaking for the Screening and Immunisation team and NHS England. The review has focused on data transfer and validation processes within Child Health Records Departments, comparing records held on CHIS against records held in primary care, and will report soon.

### 6.2.2. Healthy Children's School Based Flu vaccination and Community Pharmacy Pilot

The Screening and Immunisation team has piloted alternative methods of flu vaccine delivery. The pilot of the school based flu vaccination targeted children in school years 7 & 8 (age 11 to 13 years). Anticipating further expansion of school based immunisation delivery the school-based immunisation service has been procured.

The community pharmacy pilot targeted those over 65 years of age and patients 6 months to 64 years in clinical 'at risk' groups. In Birmingham the activity in the Pharmacy Flu Pilot was significantly higher than other areas in the Area Team. The pilot was designed to complement GP Practice delivery of seasonal flu vaccines although the transfer of vaccine administration records posed a significant challenge to the team ensuring all GP records are updated to reflect pharmacy delivered vaccines. The pilot has been evaluated and findings from the pilot will be used in planning delivery for the 16/17 flu season.

### 6.2.3. Seasonal Influenza Vaccination

Vaccination uptake has shown some improvement across England this year and this is partly reflected in Birmingham. The uptake for the Pregnant Women and 3 year cohort increased compared to 2013/14, with a 5% improvement in uptake for the cohort of pregnant women. Uptake for 6mths to 64yrs 'at risk' in Birmingham exceeded the national uptake, a big achievement for GP Practices and the Screening and Immunisation Team. Whilst improvements have been limited in areas there has been an increase in the eligible population, with overall activity increased on last year in Birmingham.

Uptake remains low across Birmingham with significant variation between GP Practices. This associated with an increase in the circulation of influenza in the community has resulted in a number of localised outbreaks of Influenza in schools and nursing/care homes across the Birmingham area. This has raised concerns in relation to at risk groups within vulnerable settings including residential homes and schools.

The screening and immunisation team set a priority for this year to improve uptake in those at risk, specifically pregnant women and children aged 2, 3 and 4. The priority is to develop joint action plans with key stakeholders to address quality issues in terms of reaching targets.

The Screening and Immunisation team has worked closely with Birmingham CCGs to drive increases in local uptake of vaccination provision in 14/15 and this will continue in 15/16.

### 6.2.4. Recent and Future Challenges

Birmingham, Solihull and the Black Country Area Team merged with the Arden, Herefordshire & Worcestershire Area Team on the 1st April 2015. The organisation is changing to a monitoring and assurance organisation as commissioning responsibility for primary care services moves to Clinical Commissioning Groups under co-commissioning arrangements.

Public Health England is also undertaking a strategic review of services. The West Midlands Centre will retain the same geographical area as it matches the NHS England structure. The Screening and Immunisation function is due for review in 2016/17.

## 7. Emergency Planning, Resilience and Response

The NHS Emergency Planning, Resilience and Response (EPRR) function is the responsibility of NHS England West Midlands. There have recently been organisational changes within NHS England locally and the recent and current capacity to provide assurance updates to the HPF has resulted in a lack of assurance reports over local EPRR arrangements for 14/15.

NHS England has major incident plans in place and conducts their emergency planning through the Local Health Resilience Partnership (LHRP). The LHRP reports into the local meeting of the Directors of Public Health. Close working between NHS England EPRR, PHE and Directors of Public Health is ongoing to ensure that the response to small public health incidents is adequate, effective and well-coordinated.

The HPF and NHS England EPRR are working to ensure that assurance is provided in 15/16.

# 8. Infection Prevention and Control

An Infection Prevention Service is provided to Birmingham Cross City CCG and Birmingham South Central CCG by Central Midlands Commissioning Support Unit.

## 8.1. MRSA Bacteraemia Post Infection Reviews

The national zero tolerance approach to MRSA bacteraemia was introduced on 1 April 2013 for all healthcare providers.

For MRSA bacteraemia there is a requirement to carry out a Post Infection Review (PIR) which is led by the assigned organisation. The PIR is conducted by a multi-disciplinary team of care providers and aims to identify the cause of the bacteraemia and agree what went well and where improvements could have been made. Lessons that will be acted on to drive improvements in patients care are also identified and will be cascaded across the CCG via the Quality & Safety Committee.

## 8.2. Incidents – Issues to note

The University Hospital Birmingham NHS Trust saw an increase in MRSA colonisation in the Burns Unit in January 2015; these cases were all typed as the same. An action plan was drawn up to include, education, screening and environmental cleaning. The ward is being monitored for further cases by screening.

During the year there has been a comprehensive programme of infection prevention audits in the nursing homes across the City. There were sporadic cases of Influenza around the City and one outbreak was reported in a BCC CCG home, which quickly settled.

There was an outbreak of Invasive Group A Streptococcus (IGAS) at one care home which has residents placed by the NHS and Council; 5 residents and 9 members of staff were affected. Nearly 300 swabs were taken from staff, residents and visiting staff to the home. All staff and residents in the affected areas were given prophylaxis antibiotics and all positive patients screened negative later. The home was closed from the 5th February 2015 to the 20th March 2015. An action plan was drawn up and all actions except one have been carried out. The outstanding action involves the removal of the carpet; this was advised as environmental swabbing grew IGAS from soft furnishings and similar outbreaks nationally have only been stopped when carpets have been replaced by alternative flooring. The issues that arose and lessons that need to be learned following this outbreak were around the funding of the antibiotics, the staff allocated to carry out the screening, and the ability to enforce decisions of the Incident Management Team.

There was a serious Salmonella community and hospital outbreak between May and June 2014. Salmonella was determined to be a contributory cause of death for 1 individual patient. The hospital Trust has conducted an internal review and the HPF is following this with a wider review of the outbreak; this is ongoing. Lessons learned so far have been used by the Trust to develop an action plan and procedures have been changed. Additional

lessons will come from the wider review and the HPF will ensure that they are shared and actions implemented.

### 8.2.1. Lessons learned and challenges

Incidents demonstrate that collaboration between Public Health England, CCG's and the Local Authority is essential to ensure incidents are managed in an effective, efficient, and timely manner. Funding, responsibilities and challenges to recommendations and guidance continue to challenge incident response.