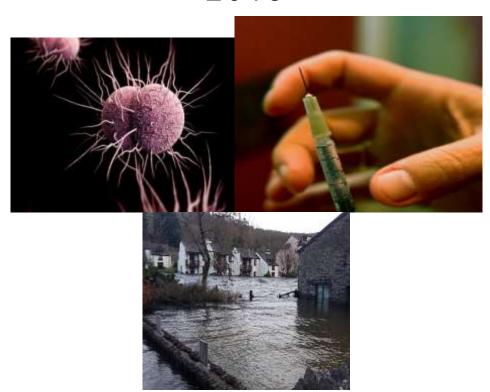


# ROTHERHAM HEALTH PROTECTION ANNUAL REPORT 2015



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#### **GLOSSARY**

AMR Antimicrobial Resistance BCG Bacillus Calmette-Guerin

CBRN Chemical Biological Radiological Nuclear

CDI Clostridium Difficile Infection
COMAH Control of Major Accident Hazards

CPE Carbapenemase-producing Enterobacteriaceae

CQC Care Quality Commission

CRCE Centre for Radiation, Chemical and Environmental Hazards

DIPC Director of Infection, Prevention and Control

DOT Directly Observed Therapy

EHC Emergency Hormonal Contraception EPSS Emergency Planning Shared Services

ESBL Extended-Spectrum Beta-Lactamase Producing Organisms

EVD Ebola Virus Disease
GI Gastro Intestinal

H&WB Health and Wellbeing Board
HCAI Health Care Associated Infections
HIV Human Immunodeficiency Virus
HPC Health Protection Committee
HPV Human Papilloma Virus

IPC Infection, Prevention and Control
LARC Long Acting Reversible Contraception
LHRP Local Health Resilience Partnership

LTBI Latent Tuberculosis Infection

MMR Measles Mumps and Rubella

MOU Memorandum of Understanding

MRSA Methicillin Resistant Staphylococcus Aureus MSSA Methicillin Sensitive Staphylococcus Aureus

NHSE NHS England

NOIDs Notifiable Infectious Diseases

PCT Primary Care Trust
PHE Public Health England

PHOF Public Health Outcome Framework

RCCG Rotherham Clinical Commissioning Group

RDaSH Rotherham Doncaster and South Humber NHS Foundation Trust

RMBC Rotherham Metropolitan Borough Council SIOG Screening and Immunisation Overview Group

SIT Screening and Immunisation Team
STI Sexually Transmitted Infections

SYLRF South Yorkshire Local Resilience Forum

TB Tuberculosis

TRFT The Rotherham NHS Foundation Trust

WHO World Health Organisation

## BACKGROUND

With the transfer of Public Health into the council there are opportunities to influence the factors which impact on the population's health and well-being over the course of a lifetime. The Public Health Outcomes Framework (PHOF) describes these under three domains; Health Improvement, Healthcare Public Health and Health Protection. Within the Health protection domain there are 27 indicators (appendix 1) which the Director of Public Health (on behalf of the council) requires assurance on.

With the introduction of several new NHS commissioning organisations and agencies responsible for health protection, roles and responsibilities for health protection have become fragmented, and at times unclear. Performance against the PHOF indicators depends on maintaining clear lines of communication with NHS commissioners and providers, Public Health England (PHE) and other departments within Rotherham Metropolitan Borough Council (RMBC), whilst at the same time, being assured that the threats to local health are minimised and dealt with promptly. The Health Protection Committee discharges this function on behalf of the Director of Public Health, the council and the Health and Wellbeing Board (H&WB).

#### ASSURANCE STATEMENT

The Health Protection Committee's (HPC) role is to ensure, on behalf of the H&WB, that adequate arrangements are in place for the surveillance, prevention, planning and response required to protect the public's health. The Committee provides an important control function, for assurance of the health protection system across Rotherham, as part of the Director of Public Health's statutory responsibility. The Health Protection Annual Report aims to provide assurance to the H&WB of the on-going work of the HPC and its partner agencies to protect the health of the Rotherham population.

There has been sustained progress in moving towards a comprehensive, multi-agency health protection assurance system in Rotherham which is robust, safe, effective, and meets the new statutory duty placed on local government to protect the health of local people. This has been achieved through the quarterly meeting of the HPC.

### SUMMARY

This Health Protection Annual Report summarises the main areas of work considered by the HPC over the period 1st January 2015 to the 31st December 2015. It includes a range of priorities identified by the Committee, our performance measured against the Public Health Outcomes Framework (see Health Protection Indicators Appendix 1) and areas where further assurance is required. Rotherham is performing well against these indicators in comparison to Yorkshire and Humber and England averages.

The themes in the report are a combination of maintaining these good outcomes and addressing any poor performance. The Committee have also raised and discussed over the

year any emerging priorities identified by partner organisations where additional assurance is required. The following are examples of some of these issues;

- Reviewing lessons learned on a range of health protection incidents and planning exercises, both internally and externally, e.g. Ebola, Human Immunodeficiency Virus (HIV), Legionella, Cryptosporidium, Clostridium Difficile, Air Quality, and Pandemic Influenza.
- Responding to complex issues raised by managing and treating TB in Rotherham whilst planning for service resilience and sustainability.
- Ensuring that the roles of all agencies involved in health protection planning are clear and effective.
- Developing a multi-agency Assurance Framework identifying the controls, gaps and mitigating actions required.

There have been considerable changes to how health protection is managed and delivered following the implementation of the Health and Social Care Act 2012. This placed a duty on local authorities in England to protect the health of the local population, discharged through the Director of Public Health. As a result of changes to the NHS structures and Local Authority, in their functions, roles and accountabilities, there has been a lack of clarity across the health protection system. In particular, this fragmentation has been highlighted by incidents/outbreaks and although always dealt with successfully, these have required considerable discussion and negotiation.

Priority areas reported through the HPC, and via other key meetings, have collectively informed the Rotherham Health Protection Assurance Framework (sample section in Appendix 3). This provides on-going assurance on the controls of hazards and threats to the health of the local population.

The agreed outline for this framework (see Appendix 3) is based on the five overarching building blocks of public health protection. These are;

- Communicable Diseases
- Environmental Hazards and Control
- Screening and Immunisations
- Infection, Prevention and Control
- Emergency Preparedness, Response and Resilience

#### RECOMMENDATIONS

- 1) The Health Protection Committee continues to oversee and review the health protection assurance system (annually), on behalf of the Local Authority, to ensure that robust arrangements are in place to protect the health of the people of Rotherham.
- 2) The Health and Wellbeing Board receives a Health Protection Report each year.
- 3) The Health Protection Committee is accountable to the Health and Wellbeing Board, and members of the Board understand the potential and existing risks to health in the borough and the key roles of partner agencies.

#### INTRODUCTION

This is the first annual report to be presented to the H&WB, it outlines the Health Protection responsibilities and structures currently in place. It will also report on the work that is being done to discharge the Local Authority's new roles and responsibilities in relation to health protection and provide some examples of good practice and areas for further development that have been identified over the calendar year.

#### What is Health Protection?

Health protection has been defined as "public health activities intended to protect individuals, groups, and populations from infectious diseases and environmental hazards. Hazards can be biological, chemical, physical or from radiation, and result in exposures through food, water, air, animals, the environment and person to person (Public Health (Control of Disease) Act 1984)<sup>1</sup> Health Protection includes planning for and responding to threats to the health of the population which would require an emergency response (Civil Contingencies Act 2004 <sup>2</sup>).

'A Hazard (defined by the Health and Safety Executive) is a potential source of harm or adverse health effect on a person or persons' and are often capable of affecting large groups of the population in a short period of time. Often the route of an exposure may be unclear and health protection therefore requires a capacity to handle risk and uncertainty as well as a capacity to respond urgently when required to manage outbreaks and the other incidents which threaten the public health, including new and emerging infections identified by the World Health Organisation (WHO)<sup>3</sup>.

## Why is it important?

Deaths from infectious diseases have decreased significantly since the first half of the 20th century with the introduction of antibiotics. Other factors have included; improved living conditions, ensuring the safety and quality of food and water and childhood immunisation programmes.

Health Protection is a term which covers many of the areas people will traditionally think of as public health. It includes protecting the public from disease particularly those which can be prevented through vaccination, caught early through screening or prevented through good hygiene and improved living conditions.

It is crucial to the health of the population to reduce the spread of infectious diseases and it is important to promote and implement interventions that we know work. Vaccination, improved living conditions and regulation on food standards have all greatly reduced the incidence and spread of infectious diseases. Work in this area is governed by statutory regulation which applies to a number of organisations, including the Local Authority.

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http://www.legislation.gov.uk/ukpga/1984/22/contents

<sup>&</sup>lt;sup>2</sup> http://www.legislation.gov.uk/ukpga/2004/36/contents

<sup>3</sup> http://www.who.int/en/

#### THE HEALTH PROTECTION COMMITTEE

The scale of work undertaken by local government to prevent and manage threats to health will be driven by the health risks in the Local Authority area. The HPC provides an important control function for the H&WB with regards to the statutory assurance arrangements to protect the health of the population. It covers the population of Rotherham (whether resident, working or visiting), reviews partners performance against the health protection Public Health Outcomes Framework (PHOF) Indicators (Appendix 1), monitors emerging threats for the following areas;

- Vaccine preventable diseases and Immunisation programmes.
- · National screening programmes.
- Infection, Prevention and Control including Health Care Associated Infections (HCAIs)
- Communicable disease control including TB, blood borne viruses, gastro-intestinal infections (GI) and seasonal influenza.
- Public Health aspects of emergency planning and preparedness (including severe weather and environmental hazards, pandemic influenza).
- Environmental hazards and control, biological, chemical, radiological and nuclear, including air and water quality, food safety
- Sexually Transmitted Infections including HIV
- Substance Misuse and blood borne viruses

At each meeting of the Health Protection Committee, a key area identified from the framework and/or emerging priorities are discussed to;

- identify the key health protection hazards and threats
- assess the associated risks
- capture the mitigating actions

This requires working with the organisations (listed below) and other members of the Health Protection Committee including The Rotherham NHS Foundation Trust (TRFT) and the Rotherham Doncaster and South Humber NHS Foundation Trust (RDaSH), to develop a high level Health Protection Assurance Framework (see example section in Appendix 3). In practice, this often requires additional attendance from co-opted services, with the relevant expertise, to unpick and delve more deeply into the relevant area of the Framework.

## Which organisations now have Health Protection responsibilities?

**RMBC** - already had a number of public health responsibilities primarily discharged through the Environmental Regulation and Noise/Nuisance teams. The council now has increased responsibilities for health protection including an assurance role that the Director of Public Health, discharges on the council's behalf.

**Public Health England** - provides a local health protection team (formally the Health Protection Agency) which has responsibility for providing specialist advice and expertise for managing health protection issues to the Director of Public Health, Environmental Health, the public and other organisations. Specialist advice and support on more unusual hazards such as chemical and radiation issues is provided by teams in partner organisations such as the Centre of Radiation Chemical and Environmental Hazards (CRCE), a division of Public Health England.

NHS England's Public Health Screening and Immunisation Team - co-ordinate routine screening and immunisation programmes which are commissioned by NHS England. They are therefore embedded within NHS England in order to inform the commissioning of these programmes. These are outlined in Section 7a of the NHS public health functions agreement 2015-16.4

**NHS England** - oversee Quality and Patient Safety of the Rotherham Clinical Commissioning Group and NHSE's Emergency Planning and Preparedness team are responsible for ensuring that Clinical Commissioning Groups and providers of NHS funded services are prepared for emergencies and for co-ordinating the NHS response to emergencies.

**Rotherham CCG** – are responsible for the investigation and treatment of infectious diseases, e.g. Health Care Associated Infections, Tuberculosis, etc. The CCG also commissions Infection Prevention and Control, Microbiology and TB Specialist treatment services from The Rotherham NHS Foundation Trust relating to health protection.

#### PERFORMANCE - PHOF INDICATORS

The Health Protection Committee reviews and challenges any areas of under-performance (PHOF indicators), subsequent risks to the local population and the mitigating actions for partner agencies. See the PHOF Health Protection Indicators included in Appendix 1.

All PHOF indicators associated with the national routine vaccination programmes for Rotherham are performing well against the England average. Although Rotherham shows a high uptake of HIV tests, late diagnosis of HIV is worse than the England average. Other areas for concern are increasing Gonorrhea rates and reduced uptake of Chlamydia testing in the under 25s. Actions to address these can be found under the Sexually Transmitted Infections section. Although not necessarily reflected in the PHOF indicator, treatment completion rates for cases of TB in Rotherham are higher than the England average due to deaths from other causes. On the whole we perform well under the PHOF indicators for health protection compared to our statistical neighbours.

This report is a combination of the performance outcomes, issues that the HPC representatives have identified as priorities and a reflection of the on-going work to protect the health of the local population. These have been highlighted under the headings:

- Communicable Diseases
- Environmental Hazards and Control
- Screening and Immunisation
- Infection, Prevention and Control
- Emergency Preparedness, Response and Resilience

<sup>4</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/389168/S7A\_1516\_FINAL.pdf

#### **COMMUNICABLE DISEASES**

Weekly reports and updates on the levels of infectious diseases and suspected outbreaks in the community are monitored by PHE. These are shared with the Local Authority as reports on the Notifications of Infectious Diseases (suspected) and suspected outbreaks (Situation Reports) to enable early detection and any emerging trends.

PHE provide expert advice and work closely together with support from Environmental Health and Public Health (RMBC), NHS England, Rotherham Clinical Commissioning Group, The Rotherham Foundation NHS Trust, Rotherham, Doncaster and South Humber NHS Foundation Trust (RDaSH) and others, to monitor and manage outbreaks or incidents associated with communicable diseases.

There are over 30 legally defined Notifiable Infectious Diseases (NOIDs) where doctors are obliged to inform the Consultant in Communicable Disease Control at PHE when they suspect a case of infection (Health Protection Notification Regulations 2010). A list of these can be found in footnote <sup>5</sup>.

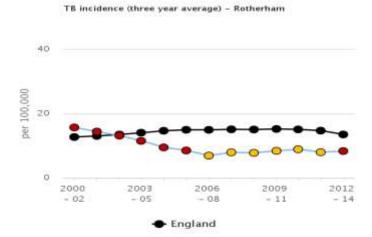
Over the year there have been various incidents in Rotherham which have required effective inter-agency management to protect the Public's Health, the primary objective being to manage any outbreak/incident by identifying the source of infection and implementing control measures to prevent further spread or recurrence of infection.

#### **TUBERCULOSIS**

Rotherham has a relatively low known prevalence of TB compared to regional and national figures. However, the homeless, being of temporary residence and born in a country with endemic TB or having a weakened immune system may make people more vulnerable. The incidents which have been investigated and treated over the last year have proved to be complex and challenging, sometimes involving chaotic lifestyles, life pressures and safeguarding issues amongst others. Future planning for increased latent screening and contact tracing, effective cross boundary working arrangements and the capacity of the Specialist TB services, have been highlighted at the HPC.

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<sup>&</sup>lt;sup>5</sup>https://www.gov.uk/guidance/notifiable-diseases-and-causative-organisms-how-to-report#list-of-notifiable-organisms-causative-agents



The above graph shows three year rolling averages for the incidence of TB in Rotherham compared to the England averages. Red indicates that the incidence of TB is greater than the 50<sup>th</sup> percentile of Unitary LAs and amber between the 50<sup>th</sup> and 10<sup>th</sup> percentile<sup>6</sup>.

Although the annual number of cases in Rotherham is fairly low, each case is often complex, requiring longer-term case management and treatment and may involve significant levels of screening to ensure no other cases of TB go undetected.

#### Successes

In March 2015, PHE and NHSE published the Collaborative Tuberculosis Strategy for England, 2015-2020 <sup>7</sup>. A TB Control Board for North East & Yorkshire & Humber has been established and TB Cohort Reviews commenced for patients across South Yorkshire. A local multi-agency meeting has reviewed the ten evidenced based areas of the National Strategy to develop a local action plan.

There have been a number of incidents over the year requiring a co-ordinated response from partners /stakeholders. This has been extremely rapid with effective partnership working with the TB Specialist Nurse in treating and preventing further infection.

## Challenges and future work

Several significant challenges remain locally and across South Yorkshire to strengthen and build the resilience of the specialist TB treatment services. These include local commissioning arrangements for consideration by the CCG and the future impact on local services from cases that develop as a result of latent TB infection (LTBI).

Commissioning services to detect and treat latent infection will be fundamental to the control of TB in Rotherham (in line with the national strategy). Robust arrangements will be required to

<sup>6</sup> Definition: a percentile (or a centile) is a measure used in statistics indicating the value below which a given percentage of observations in a group of observations fall.

<sup>&</sup>lt;sup>7</sup>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/403231/Collaborative\_TB\_Strategy\_for\_England\_2015\_2020\_.pdf

more effectively mobilise support for raising awareness among affected communities and encouraging screening and support for Directly Observed Treatment (DOT), including their non-healthcare needs (e.g. financial help, housing).

## **EBOLA**

On 23 March 2014, WHO confirmed an outbreak of Ebola Virus Disease (EVD) in South-Eastern Guinea, the first time an outbreak has been identified in this part of Africa and the largest known outbreak of this disease. Although the overall risk to the UK remained low, national briefs in the form of weekly updates, a range of guidance and national, regional and local meetings/tele conferences were established. Enhanced screening was initiated at the main airports and other points of entry into the UK. Two hospitals in England were designated for receiving patients suspected of Ebola infection.

#### Successes

The range of public health prevention and control measures implemented internationally and nationally reduced the risk of human-to-human transmission by ensuring that:

- Those travelling to and working within affected countries knew what to do if they developed symptoms and were assessed on return
- Suspect cases received immediate medical attention and isolation
- The correct use of Personal Protective Equipment, hand hygiene, case management and a clean environment were maintained
- Prompt and safe burials of the dead were conducted in West African countries
- There was on-going surveillance and contact tracing through the World Health Organisation and Public Health England
- The health of contacts was monitored for 21 days

Locally, weekly multi-agency planning meetings were held, following strategic assessment by NHSE and PHE. These were led by the Chief Nurse and Microbiologist of The Rotherham Hospital Foundation Trust. These meetings entailed a brief update on the current situation and review of the latest guidance.

Further discussion also took place on risk assessments, identifying and managing patients, treatment options, isolation planning, transfer and movement of patients, training and exercising on the use of PPE, waste disposal and environmental cleaning and staff communications. Regular PHE briefings were circulated to all partner agencies including via council briefings

## Challenges and future work

The UK lessons from Ebola reported on the UK Parliament website (25th January 2016, UK Parliament - Ebola Inquiry) identified the following areas for improvement at a national level:

 There were systemic delays escalating the information from surveillance data to the convening of the Scientific Advisory Group for Emergencies (SAGE) which advises the government

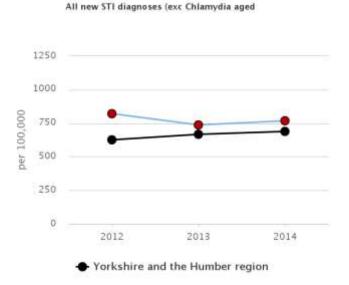
- Embedding research and vaccine manufacture at an early stage of any future emergency response to an epidemic
- The evidential basis for interventions are made explicit (i.e. Airport screening) where personnel from PHE provided advice to people travelling to West Africa and monitored them on their return to the UK

In the future, with any emerging global infection, it is important to ensure that the relevant health and travel advice is provided, communications with staff are based on PHE or other expert advice, the response is proportionate, occupational health advice/unions are involved where appropriate and there is due consideration to duty of care and disclosure for staff working in RMBC.

#### SEXUALLY TRANSMITTED INFECTIONS

The Health and Social Care Act of 2012 dramatically changed the commissioning landscape for sexual health services. Prior to April 2013, sexual health services as well as HIV services, contraception, termination of pregnancy, gynaecological services, obstetrics and health visiting services were commissioned through the Rotherham Primary Care Trust (PCT). Following the Act:

- The Local Authority is now responsible for commissioning sexual health services (including HIV testing), contraception, education and advice.
- HIV treatment is commissioned by the Specialised Commissioning Group, who hold a separate budget within NHS England.
- RCCG commissions termination and other gynaecological services
- NHSE/RCCG co-commission primary care services



The STI rate (excluding chlamydia) in Rotherham in 2014 was higher than the Yorkshire and Humber rate (see graph above) but lower than the national rate (see figures in table below). Overall, the trend in the rate of all STIs in Rotherham is reasonably flat, in keeping with Yorkshire and Humber and national rates. New STI rates for 2014 (excluding Chlamydia) for

Rotherham were 767 per 100,000, Yorkshire and Humber was 688 per 100,000 and England 829 per 100,000.

Period	Number	Rate	Yorkshire and the Humber	England
2012	<b>1,357</b>	820	625	819
2013	<b>1,211</b>	736	666	818
2014	<b>1</b> ,262	767	688	829

## Successes

#### HIV

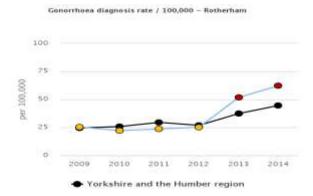
Although overall numbers of those living with HIV in Rotherham is reported as a low known prevalence, the treatment agencies have reported seeing an increase in numbers over the last couple of years. This became apparent following information shared as part of a contracting discussion with the local Genito-Urinary Medicine department (TRFT). On advice from PHE, an HIV incident meeting was called due to the higher than usual diagnoses of HIV over the first few months of 2015. Consequently, over a period of 6 months, Public Health (RMBC) chaired several multi- agency meetings, using the guidance below, to ensure that the necessary control measures were implemented to minimise the spread of HIV and the potential for an outbreak <sup>8</sup>. As with other incidents/outbreaks, this was reported to the Health Protection Committee to ensure any additional actions were implemented as a result of lessons learned. Subsequently, PlusMe (voluntary sector HIV organisation providing support, prevention and promotion work) were commissioned to increase targeted HIV testing in the community.

## Challenges and future work

#### Gonorrhea

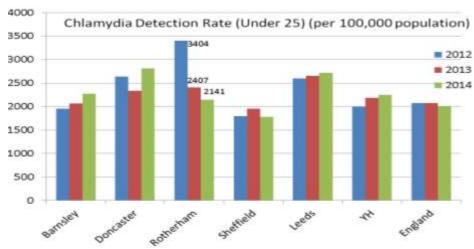
Rotherham had the second highest rate of gonorrhea diagnosis among Yorkshire and Humber local authorities in 2014. This shows a sharply increased trend since 2012 (in line with the national picture). This coincided with an increase in the availability of local testing, the use of the latest testing methods and additional screening of extra-genital sites in Men who have Sex with Men (MSM) (see graph below).

<sup>8</sup>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/343723/12\_8\_2014\_CD\_Outbreak\_Guidance\_REandCT\_2\_2\_.pdf.



## Chlamydia

The number of Chlamydia detected in those screened has come down from 3404 per 100,000 population in 2012 to 2141 in 2014 (PHOF 3.02) A high detection rate reflects success in identifying Chlamydia infections which, if left untreated, may lead to serious reproductive health consequences.



Sexual Health Services are therefore implementing a contingency plan to target those young people who are most likely to be at risk of acquiring an STI, including chlamydia, thereby increasing the detection of chlamydia positive cases. This is important as we are already aware that there is a high background rate in the community for Chlamydia across the UK.

## **EMERGING INFECTIONS**

#### Zika Virus

In October 2015, the Brazilian Ministry of Health reported an unusual increase in the number of babies born with microcephaly (a smaller head than expected which can be due to abnormal brain development) and suggested a possible link between the increase in microcephaly and the ongoing Zika virus outbreak. Previously the Zika virus, a mosquito-borne infection, hadn't been harmful in most cases. However, due to the cluster of neurological disorders and neonatal malformations and the rapid spread of infection reported in the Americas region, the

WHO announced a Public Health Emergency of International Concern on the 1<sup>st</sup> February 2016 <sup>9</sup>.

One of the roles of the HPC is to monitor the latest PHE surveillance information to keep a watching brief on any emerging infections which may have an impact on the population of Rotherham and the council.

## **ENVIRONMENTAL HAZARDS AND CONTROL**

Environmental Health has a wide remit which educates, regulates and enforces legislation to ensure quality air, safe food, safe working environments for employees and customers, safe and clean environments and minimising nuisances such as noise and smoke. Pest control contributes to reducing disease caused by pests whilst Animal Welfare helps to reduce dog fouling, dangerous animals and encourage responsible ownership.

#### **Non-Infectious Environmental Hazards**

Public Health and PHE work with a number of colleagues within the Local Authority on issues relating to environmental hazards, including the air quality team and the environmental regulation and safer neighbourhoods teams.

## CONTROL OF MAJOR ACCIDENT HAZARDS (COMAH)

Fires involving waste materials have the potential to release products of combustion including particulate matter (PM10 and PM2.5), and organic and inorganic irritant gases depending on the type of waste involved and the temperature at which the fire burns. Smoke from any source is an irritant, affecting the eyes and throat of individuals exposed to the plume, and may worsen existing breathing and heart conditions.

Long running waste fires can generate media and public concern associated with their potential to impact on public health. The response to such fires can be very resource intensive for all agencies involved.

#### Successes

The Environment Agency and South Yorkshire Fire and Rescue Authority are contingency planning to mitigate against, and effectively deal with, potential fires at waste recycling management sites. There is on-going work with partners, such as PHE and Local Authorities to:

- Save people and the environment from injury or damage
- Treat injuries and environmental damage as quickly as possible
- Promote rapid recovery

<sup>&</sup>lt;sup>9</sup> https://www.gov.uk/government/news/zik<u>a-virus-travel-advice-for-pregnant-women</u>

At a recent fire at a waste recycling management site in Rotherham, the situation was dealt with quickly and effectively.

There is on-going work with partners around effective support, appropriate enforcement and options for sharing low level intelligence on potential fire risks at waste recycling management sites.

## **AIR QUALITY**

There is now significant evidence that establishes the fact that air pollution impacts significantly on our health. It is important to communicate this to colleagues and the community as there are short-term and medium-term measures to reduce this, recognising that people will want to understand the local significance, hotspots and action to take about this 'unseen threat'.

A key pollutant which affects people's health is fine particulate pollution (PHOF indicator 3.01), which can penetrate deep into the lungs. During 2015, RMBC installed real time monitoring for PM2.5 (particles less than 2.5 microns in size) at St Ann's School (postcode, S65 1PD), which educates 450 children and which is in one of Rotherham's Air Quality Management Areas. Real time air quality monitoring has also continued at Blackburn Primary School (postcode S61 2BU), close to the M1 motorway and in Bradgate in the A629 Air Quality Management Area.

## Successes

We have developed a 'Care4Air' film to communicate key messages about air pollution and health through a range of interactive mediums <sup>10</sup>.

Following a high air pollution episode, the council (Public Health and Community Protection) ensured that the appropriate public health advice was made available for both staff and the public on the internet/intranet. A local Air Quality action sheet which includes key public health messages for use through social media, RMBC comms and customer contact teams, has been developed for any future episodes.

## Challenges and future work

The council is currently seeking partners to create a "living wall" at St Ann's School to help protect the children from high levels of air pollution. Research on urban vegetation suggests that it can help to reduce the impact of pollution on people and buildings. The use of vegetation to act as screens are sometimes referred to as "Living Walls"<sup>11</sup>.

During 2016/17, two new PM2.5 monitors will be installed close to Waverley New Community and the M1 Smart Motorway J35A-J28 scheme which will pass through Rotherham. It is predicted that there will be an impact in terms of increased exposure to air pollution for residents who live very close to the M1. The council supports the use of speed restrictions at

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<sup>10</sup> http://www.car<u>e4air.org/</u>

<sup>&</sup>lt;sup>11</sup> Definition: A green wall is a wall partially or completely covered with greenery that includes a growing medium, such as soil. Most green walls also feature an integrated water delivery system. Green walls are also known as living walls or vertical gardens and help protect against air pollution.

peak times to reduce the levels of pollution close to the M1 in Rotherham. Levels of pollution close to the motorway will continue to be monitored.

#### SCREENING AND IMMUNISATION

All of the screening and immunisation programmes are nationally specified by Public Health England (PHE) and commissioned by NHS England, several of which are included in the PHOF indicators. Assurance for these programmes is received through the South Yorkshire & Bassetlaw Screening and Immunisation Oversight Group (SIOG) to ensure there is a targeted, equitable and successful uptake and delivery of safe, high quality services.

Local multi-agency groups are also set up, such as for Measles Mumps and Rubella (MMR) catch up, BCG, seasonal flu and other vaccination delivery, which in turn report to quarterly Programme Board meetings chaired by the Screening and Immunisation Team (SIT). For each vaccination programme area, specific performance, barriers, achievements, future planning and quality assurance are discussed.

## **Screening Programmes**

There are a total of 14 screening programmes in England<sup>12</sup> across the life course, 9 for mothers during pregnancy and newborn babies, and 5 for later in life to detect Breast, Bowel and Cervical cancers, as well as Abdominal Aortic Aneurysm and Diabetic Eye Retinopathy.

Screening and Immunisation Co-ordinators work closely with primary care colleagues, carrying out general practice visits to build positive working relationships, share best practice and specific practice uptake data and also to encourage the promotion of screening and immunization within their population.

#### **Routine Vaccination and Immunisation**

The population is offered routine vaccinations for protection against 14 infectious diseases in childhood, adolescence and as adults, e.g. Meningitis B and C, MMR, etc. In addition, four vaccines are available for specifically eligible at risk groups. Girls are offered Human Papilloma Virus (HPV) vaccinations to protect women later in life against the most common cancercausing types of HPV.<sup>13</sup>.

## Successes

Overall for Rotherham, population vaccination coverage for all routine vaccines are above the national average and achieving the PHOF targets. In addition, the following were achieved:

 Implementation of a South Yorkshire and Bassetlaw Hepatitis B Pathway for all babies born to Hepatitis B positive mothers, ensuring 100% follow up

<sup>&</sup>lt;sup>12</sup> http://www.nhs.uk/Livewell/Screening/Pages/screening.aspx

<sup>&</sup>lt;sup>13</sup> http://www.nhs.uk/conditions/vaccinations/pages/vaccination-schedule-age-checklist.aspx

- High uptake for the Whooping Cough vaccine in pregnancy in Rotherham (74.5% 2014/2015) and Rotavirus vaccine (over 95%) has seen incidence of the disease reduced
- Introduction of the national Meningitis B immunisation programme for babies and the new Meningitis ACWY (meningococcal A, C W and Y diseases) programme for adolescents
- The Screening and Immunisation Team (SIT) have worked intensively with GP practice nurses to ensure that there is a greater awareness around 'cold chain failure' (failure in procedures to maintain vaccine temperature from manufacture to administration to the patient)

## Challenges and future work

- The SIT will enhance the delivery of dedicated health promotion for screening through the South Yorkshire and Bassetlaw Fear or Smear website <sup>14</sup> and general practice visits, to increase cervical screening uptake in the 25-49 age groups (recent downturn in uptake consistent with the national picture).
- The HPC will seek assurance from NHSE that at risk babies are able to be immunised with the BCG vaccine before discharge.
- Health and Social Care worker seasonal flu uptake is 20% lower this year. Future work
  will focus on clear myth busting messages and dedicated communication as well as
  engagement with care home providers and community care providers to reinforce their
  responsibilities.

#### INFECTION PREVENTION AND CONTROL

Since 2008, there has been a legal requirement for all NHS organisations to implement the Health and Social Care Act (2008), for the prevention and control of Health Care Associated Infections. There are a number of similar arrangements for Infection, Prevention and Control (IPC) advice and support operating across South Yorkshire and Bassetlaw. This includes established systems for the notification and review of HCAIs between the providers and commissioner (RCCG) to ensure compliance with the Health and Social Care Standards/Care Quality Commission (CQC) standards, relevant legislation and NICE guidance.

#### **HEALTH CARE ASSOCIATED INFECTIONS**

## **Mandatory and Voluntary Surveillance Programmes**

Both community and hospital acquired bacteraemia infections are being monitored on a monthly basis as part of the national surveillance and reporting required of NHSE and CCGs. This is undertaken by the microbiology laboratory and the Infection Prevention and Control Team (TRFT). The mandatory surveillance and reporting includes MRSA (Methicillin-Resistant Staphylococcus Aureus), MSSA (Methicillin Sensitive Staphylococcus Aureus), E.Coli,

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<sup>14</sup> http://fearorsmear.dbh.nhs.uk/

Clostridium Difficile (C.Diff) and Carbapenemase-producing Enterobacteriaceae (CPE). Voluntary surveillance and reporting includes Extended-Spectrum Beta-Lactamase Producing Organisms (ESBLs) and Beta haemolytic group A Streptococcus.

#### **Trajectories**

There are annual trajectories set for the Acute Trust and the CCG (the latter includes the acute). These trajectories are set from April to March each year. There is a zero tolerance trajectory set for MRSA bacteraemia for both the Acute Trust and the CCG. For C.Diff, the trajectory for TRFT acute is 26 cases and for RCCG, 63 cases. Every case of C.Diff and MRSA undergoes a Route Cause Analysis or Post Infection Review with joint collaboration between TRFT, the Commissioners and primary care, with the aim of identifying learning outcomes and actions to prevent further cases.

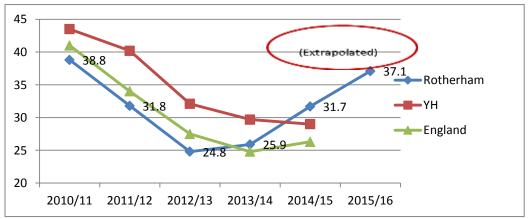
HCAIs continue to cause a challenge as a result of the extensive use of broad-spectrum antimicrobials and the development of resistance to treatment (Antimicrobial Resistance (AMR)/Antimicrobial Stewardship).

Other key areas for the HPC to keep a watching brief on are:

- The potential impact of Norovirus outbreaks
- The availability of improved testing and surveillance systems
- Reviewing IPC services across the wider community, such as care homes, schools and primary care

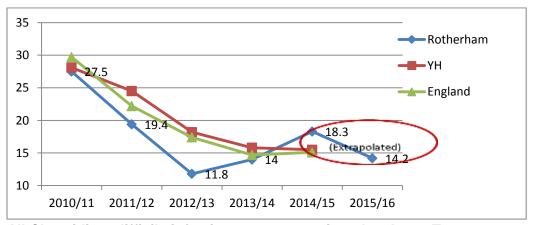
#### **CLOSTRIDIUM DIFFICILE**

The two graphs below show the trends in Clostridium Difficile Infections (CDI) incidence by Clinical Commissioning Group (CCG) and Acute Trust in Yorkshire and the Humber respectively.



**All Clostridium difficile infection cases by CCG** Quarterly rates of all Clostridium difficile infections per 100,000 population from July 2011 to June 2015. Extrapolated by PHE, assuming no changes in the trend.

The incidence of Clostridium difficile infections (CDI) apportioned to the community has reduced since 2010/11 in Yorkshire and Humber (Y&H) but has risen slightly in 2014/15 in England. In Rotherham, 37 cases of CDI were reported in 2010/11 reducing to 31 in 2012/13. This has risen to 46 in 2014/15, the highest since 2010/11. Work is therefore focusing on initiatives to reduce community cases of CDI.



**All Clostridium difficile infection cases apportioned to Acute Trusts** Quarterly rates of all Clostridium difficile infections per 100,000 population from July 2011 to June 2015. Extrapolated by PHE, assuming no changes in the trend.

Whilst the incidence of Clostridium difficile infections, apportioned to the Acute Trust in Rotherham, had dramatically reduced from 2010/11 to 2012/13 (also reflected in the regional and national figures), there were significant increases over the following two years to 2014/15. For 2015/16, this now appears to be falling back to 2013/14 levels, below our current trajectory for the acute trust.

## **Challenges and Future Work**

Whilst there have been reductions in hospital acquired C.Diff and MRSA rates over the years, comparing favourably with Y&H and England averages, community – based infections for C.Diff (see CCG figures) and including MRSA, MSSA and E.coli are higher than the national averages. Consequently, work in 2016 which will be reported regularly to the HPC will include:

- Clarifying commissioning arrangements and delivery across the patient pathway to enable an integrated approach to Infection, Prevention and Control services across the borough
- Improving surveillance and data collection on the source of infection and undertaking multi-agency investigation to enhance targeted interventions, in particular, communitybased transmission

#### **ANTIBIOTIC RESISTANCE**

Antibiotic resistance is an everyday problem in all healthcare settings across England, Europe and the rest of the world. The spread of resistant bacteria in hospitals or community healthcare settings is a major issue for patient safety:

- Infections with antibiotic-resistant bacteria increase levels of disease and death, as well as the length of time people stay in hospitals
- Inappropriate use of antibiotics may increasingly cause patients to become 'colonised' or infected with resistant bacteria
- Few new antibiotics are being developed. As resistance in bacteria grows, it will become more difficult to treat infection, and this affects patient care



The rapid spread of Carbapenem-resistant bacteria has great potential to pose an increasing threat to public health and modern medicine as we know it in the UK. A national programme of early detection and application of appropriate infection prevention and control measures were introduced locally in acute and community settings.

Locally, the Antimicrobial Stewardship Group, chaired by the Director of Infection Prevention and Control (DIPC) who is also a member of the HPC, meets to review hospital and community control measures to ensure good antimicrobial stewardship and to monitor local practice. The group meets monthly to audit different areas of clinical practice and engage with clinicians more effectively.

## EMERGENCY PREPAREDNESS, RESPONSE AND RESILIENCE

The South Yorkshire Local Resilience Forum (SYLRF) has oversight of the emergency planning arrangements of organisations across South Yorkshire; including, Local Authorities, Police, Fire and Rescue, Ambulance Service, Environment Agency, British Transport Police and the NHS. Its health equivalent is the Local Health Resilience Partnership (LHRP) which provides a strategic forum for local organisations to facilitate health sector preparedness and planning for emergencies at an LRF level. NHS England is responsible for being assured that providers of NHS funded services are prepared for emergencies. The LHRP is co- chaired by NHS England and a Director of Public Health (for South Yorkshire and Bassetlaw.

RMBC is part of the Emergency Planning Shared Service with Sheffield City Council (SCC) which links into the SYLRF and Public Health (RMBC/SCC) with the LHRP.

The Sheffield and Rotherham Emergency Planning Shared Service (EPSS) has a range of plans drawn up to respond to a variety of emergency situations which are regularly reviewed and updated. There are some additional responsibilities of the Local Authority in relation to public health, e.g. Pandemic Influenza and Communicable Disease Outbreak Plans which has required some of the EPSS plans to be updated to include some of the new public health roles and responsibilities. For instance, Communicable Disease Outbreak Management, Operational Guidance (PHE, Aug 2014) has been incorporated into the operational plans for the Local Authority <sup>15</sup>.

#### Pandemic Influenza

A new influenza [flu] pandemic continues to be recognised by the government as one of the most severe natural threats facing the UK, which is why it remains at the top of the UK Government National Risk Register. Experts state it is a case of when, not if, a new flu

<sup>&</sup>lt;sup>15</sup>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/343723/12\_8\_2014\_CD\_Outbreak\_Guidance\_REandCT\_2\_\_2\_.pdf

pandemic occurs. This is reflected in both the Public Health Directorate and Corporate risk registers where it remains a high priority.

Although the outbreak of H1N1 influenza in 2009 ('swine flu') did not match the severity of the scenario planned for, it is not necessarily indicative of future pandemic influenzas. The Public Health Pandemic Flu Response Plan has been revised to reflect changes in the commissioning arrangements and NHS structures since the Health and Social Care Act. It sets out precautionary, proportionate and flexible arrangements for the management of response and recovery to a pandemic.

### Successes

A number of training sessions and simulation exercises have been facilitated via the Emergency Planning Shared Service:

- Exercise Albireo (16 April 2015) recognising the high risk of pandemic influenza, Exercise Albireo was a multi-agency desk top exercise commissioned by the South Yorkshire Local Resilience Forum with the aim of validating their Pandemic Influenza Plan (Version 4.5 June 2014). The objectives included:
  - 1. Assess multi-agency preparedness and response to an influenza pandemic across South Yorkshire.
  - 2. Raise awareness of pandemic influenza arrangements.
  - 3. Exercise individual organisations Pandemic Influenza Plans specifically to ensure alignment with the LRF plan.
  - 4. Explore roles and responsibilities of the NHS, Public Health England and Local Authorities following the NHS restructure in 2013.
- Live COMAH exercise (March 2015) live play response to an incident at a COMAH site.
- Exercise Lodge (June 2015) an internal council wide exercise to test a thematic approach to emergency situations. A debrief took place and recommendations were made.
- Exercise Black Swan. 16 (Sept 2015) facilitated by South Yorkshire Fire and Rescue Service, this exercise was aimed at ensuring an effective response and recovery when dealing with a Chemical, Biological, Radiological or Nuclear (CRBN) event.

## Challenges and future work

- Greater national clarification is required on the NHS command and control arrangements for a local incident or emergency.
- Exercise Cygnus (April 2016) South Yorkshire LRF participation in the national influenza pandemic exercise which was deferred from 2014 due to the onset of Ebola.

<sup>&</sup>lt;sup>16</sup> Definition: a 'Black Swan' is an event or occurrence that deviates beyond what is normally expected of a situation and that would be extremely difficult to predict.

This will be at a strategic level only, to assess the multi-agency gold command level response.<sup>17</sup>

 The South Yorkshire Community Risk Register is to be reviewed in 2016 to determine our risk and hazard priorities and inform the SYLRF activities.

#### PROGRESS ON ASSURANCES

There were several general learning points for the council and other partners which could be applied to a range of health protection scenarios. These included;

- Receiving timely alerts and information from external partners on environmental hazards
- Holding incident meetings where control measures can be agreed following a clinical/workplace assessment for communicable diseases
- Interventions (control measures) are based on expert advice from PHE and other specialist services to ensure an effective and proportionate response
- The response is proportionate with respect to the actual/perceived risk, and consideration given to patient confidentiality and our duty of care
- Seeking expert advice from Caldicott Guardians/legal departments when required
- Appropriate communications; taking into account the individual, other employees, managers, Human Resources, the unions and media interest

## South Yorkshire local Health Protection Memorandum of Understanding

This Memorandum of Understanding (MOU) describes the health protection roles and responsibilities for agencies in South Yorkshire relating to emergencies, incidents and outbreaks. It specifically aims to outline the public health roles and responsibilities of Directors of Public Health, Local Authorities, Public Health England, NHS England and Clinical Commissioning Groups which was agreed in 2015.

### **Health Protection Committee**

The Health Protection Committee was revised in 2014 with new Terms of Reference and a renewed focus on assurance (see Appendix 2). Although there remains a lack of clarity with regard to some health protection issues nationally, there are strong working relationships across Rotherham and South Yorkshire supported by locally developed agreements to promote an appropriate and timely response to health protection issues. Mitigating actions are agreed by partner agencies, where gaps are identified in procedure or provision, in order to better protect the health of the population.

## **Health Protection Assurance framework** (See Appendix 3)

There has been sustained progress in moving towards a comprehensive, multi-agency health protection assurance system in Rotherham which is robust, safe, effective, and meets the new statutory duty placed on local government to protect the health of the people of Rotherham. This has been achieved through the quarterly meeting of the Health Protection Committee.

<sup>&</sup>lt;sup>17</sup> Definition: gold–silver–bronze command structure is used by emergency services of the United Kingdom to establish a hierarchical framework for the command and control of major incidents and disasters.

## **Public Health England**

PHE regularly share surveillance data on a range of communicable diseases, through local daily situation reports used as an early warning system on outbreaks in the community and weekly Notifications of Infectious Diseases (NOIDs). Routine liaison meetings are held between Public Health and Public Health England (in an advisory capacity to Local Authorities) to consider current priorities, emerging concerns and best practice.

## **Incident/Outbreak Management**

Rotherham has maintained and built on a strong collaborative spirit among public health and other partners working in health protection across Rotherham and other Local Authorities in South Yorkshire. Multi-agency incident/outbreak meetings have been held on numerous occasions led by PHE, the DIPC or CCG Lead Infection Prevention and Control Nurse regarding HCAIs, TB, HIV, etc. Where possible, the source of infection is identified and clinical assessment undertaken before implementing the proportionate control measures to prevent further spread or recurrence of infection. Following any significant local incident, learning is shared between agencies and reported through to the HPC.

## National/Regional/Local Alerts

In addition to the interventions identified throughout the main body of this report, there were a range of national alerts and notifications which were managed locally over 2015. This provides the council with the opportunity to alert, inform and advise the local population or services as appropriate. For example; Air Pollution, Cold Weather, Heatwave.

### **FORWARD PLANNING 2016/17**

There are a number of mechanisms already in place for the delivery of routine health protection activities by partners which will be sustained over the year, including:

- Delivery and surveillance of vaccination and screening programmes delivered by a number of providers commissioned by NHS England
- Monitoring of HCAI cases, and IPC activity in hospitals and the community
- Disease surveillance and notifications/alerts by Public Health England
- Managing incidents associated with communicable diseases including TB, Sexually Transmitted Infections, water-borne and food-borne infections
- Drugs and substance misuse services commissioned by RMBC

In addition, the HPC will continue to meet quarterly to review all areas of health protection including updating the Health Protection Assurance Framework which provides a comprehensive tool to manage risks across all the areas of health protection.

Further, the South Yorkshire local Health Protection Memorandum of Understanding describes the health protection roles and responsibilities for agencies in South Yorkshire for emergencies and incidents/outbreaks. The roles and responsibilities of Directors of Public Health, Local Authorities, Public Health England, NHS England and Clinical Commissioning Groups, outlined in this document, will be reviewed by the HPC in relation to its local implications.

Finally, stronger links will be sought with the Local Health Resilience Partnership (LHRP) which has signed agreements in place with each NHS organisation across South Yorkshire.

#### COMMUNICABLE DISEASES

## **Sexually Transmitted Infections (inc.HIV)**

RMBC will be tendering for integrated sexual health services during 2016/17. Services currently in scope include:

- STI testing and treatment (excluding HIV treatment).
- Provision of contraception, including Long Acting Reversible Contraception (LARC), condom distribution schemes and Emergency Hormonal Contraception (EHC), Outreach to vulnerable groups.
- Health promotion and prevention including HIV prevention.
- Chlamydia screening.

#### **Tuberculosis**

The HPC will continue to:

- Explore options to strengthen the sustainability and resilience of TB specialist services in Rotherham and across South Yorkshire
- Review options for latent screening and support for affected communities
- Develop closer links with the Yorkshire and Humber and North East TB Control Board

## **Emerging Infections**

Public Health will continue to work closely with PHE (who monitor Infectious Diseases for Animal and Human Health), to consider any local implications such as:

- Relevant health and travel advice.
- Communications for local stakeholders (based on PHE/expert advice).
- Ensuring that the response is proportionate.
- Ensuring learning from incidents is reported to the Health Protection Committee.

## **SCREENING AND IMMUNISATION**

We will continue to oversee the implementation of:

- Rotherham's two year screening and immunisation improvement plan, which identifies the priorities and future planning work with all local stakeholders.
- Promote the South Yorkshire & Bassetlaw 'Fear or Smear' website across Rotherham (including general practices).
- Focus on clear myth busting messages and dedicated communications to increase the seasonal flu vaccine uptake.

## INFECTION PREVENTION AND CONTROL

#### The HPC will:

 Select members of the HPC and key specialists on Infection, Prevention and Control (IPC), who will be tasked with clarifying local commissioning arrangements and service delivery.  Oversee the multi-agency work to improve surveillance and data collection on community-based transmission of HCAIs and targeted interventions. This will involve working closely with the Lead Nurse for IPC and the Pharmaceutical Advisor at RCCG, the IPC Team at TRFT and PHE to identify gaps and mitigating actions.

## **ENVIRONMENTAL HAZARDS AND CONTROL**

Public Health and Environmental Health will report to the HPC on implementation of the RMBC Air Quality Action Plan which aims to improve air quality across the borough (especially the Air Quality Management Areas) by:

- Monitoring PM 2.5 at different locations using a mobile monitor deployed across selected sites in the borough.
- Raise awareness with the council and Rotherham population on the key messages around air quality and health.
- Ensure timely and appropriate communications are disseminated in any air quality incident.
- Implement mitigating measures, such as 'living walls' and other health protection measures.

## EMERGENCY PREPAREDNESS, RESPONSE AND RESILIENCE

The HPC will ensure that Emergency plans for potential future health protection incidents are kept under review and tested when possible, for instance:

- SYLRF Pandemic Flu plans Exercise Cygnus
- Public Health Influenza plans
- Incident/Outbreak management plans (local)
- Mass Treatment/Vaccination plans

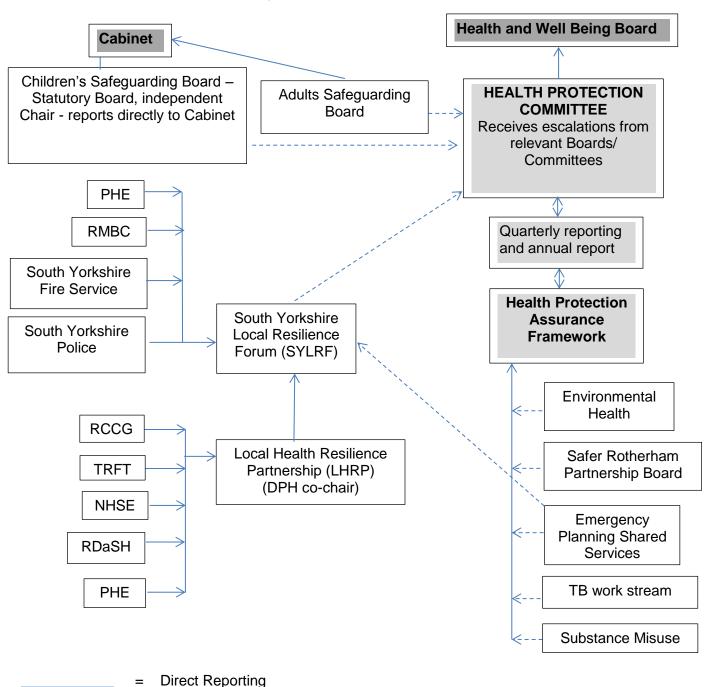
#### **APPENDIX 1**



**Health Protection Indicators (PHOF)** 

#### **APPENDIX 2**

## **Assurance and Accountability Processes for Health Protection Committee**



Provides assurance and escalate via HP Committee

## **APPENDIX 3**

KEY Low Medium High

#### RAG rating on the effectiveness of controls from assurance work undertaken

Significant concerns over the adequacy/effectiveness of the controls in place in proportion to the risks Some areas of concern over the adequacy/effectiveness of the controls in place in proportion to the risks Controls in place assessed as adequate/effective and in proportion to the risks Insufficient information at present to judge the adequacy/effectiveness of controls

## **HEALTH PROTECTION ASSURANCE FRAMEWORK**

Topic area	Hazard or Threat Description	Control Measures	Assurance on Controls	Control RAG Rating	Assurance sufficient? Y/N	Area for Development work
	PREVENTION: Strategic objective To ensure local authority and partners are supporting preventive actions to protect the health of the population					
	1. COMMUNICABLE DISEASES					
Surveillance	SU1: Failure to recognise and cascade information regarding new and emerging infections in a timely manner to initiate response	WHO and European Centre for Disease Control Surveillance National Cascade via Gov.UK (PHE/DEFRA) and CMO Alerts Department of Health National Expert Panel on New and Emerging Infections (NEPNEI)	Daily Sit Reps Weekly Notification of Infectious Diseases Report (NOIDs) PHE Monthly Disease Report on Emerging Infections National and local Flu directives PH/EPSS signed up to alerts Press releases and other public communications			Work with Emergency Planning Shared Services, Environmental Health, Comms and Public Health England to embed alerts and communications in local arrangements
	SU2: Failure to manage and control the spread from an existing or newly emerging infectious disease. (Also see Section 1 EPRR tab)	Communicable Disease Outbreak Management - Operational Guidance (PHE, 2014)	Notes and actions from Incident/Outbreak meetings			Lessons learnt and implemented Development of Rotherham Mass Treatment/vaccination plan