

ANNUAL HEALTH PROTECTION REPORT FOR CAMBRIDGESHIRE 2016/7**1. INTRODUCTION**

- 1.1 This report provides an annual summary of activities in Cambridgeshire to ensure health protection for the local population.
- 1.2 The services that fall within Health Protection include:
 - i. communicable (infectious) diseases – their prevention and management
 - ii. infection control
 - iii. routine antenatal, new born, young person and adult screening
 - iv. routine immunisation and vaccination
 - v. sexual health
 - vi. environmental hazards.
- 1.3 It is important that there is publicly available information that demonstrates that statutory responsibilities for health protection have been fulfilled; to have the means to seek assurance of this; and to have processes in place to address and escalate any issues that may arise.
- 1.4 The Director of Public Health (DPH) produces an annual health protection report to the Health Committee, which provides a summary of relevant activity. This report covers multi-agency health protection plans that are in place to establish how the various responsibilities are discharged. Any other reports will be provided on an ad hoc or exceptional basis where a significant incident, outbreak or concern has arisen.
- 1.5 Details of the legislative background to the role of DPH and the role of the City Council in relation to health protection have been included in previous annual health protection reports and will not be reproduced here.

2. CAMBRIDGESHIRE HEALTH PROTECTION STEERING GROUP

- 2.1 To enable the DPH to fulfil the statutory responsibilities in relation to health protection, the Cambridgeshire Health Protection Steering Group (HPSG) was established in October 2013 and is chaired by the DPH or nominated deputy. The HPSG enabled all agencies involved to demonstrate that statutory responsibilities for health protection have been fulfilled; to have the means to seek assurance of this; and to have processes in place to address and escalate any issues that may arise. In addition, a memorandum of understanding (MOU) has been agreed with partner organisations. The HPSG facilitated information sharing and planning across agencies.
- 2.2 With the greater sharing of public health roles across the two local authorities – Cambridgeshire County Council and Peterborough City Council - and in recognition that the role of many of the organisations that contribute to the HPSG also cover the wider geography, it was agreed to bring the committees for both areas together from October 2015. Initially the agendas consisted of three sections – Peterborough only items; Joint Peterborough and Cambridgeshire items; and Cambridgeshire only items. However it became clear that most items of concern to the committee were shared across the two areas and from October 2016 the agendas were merged and revised Terms of

Reference drawn up for the Joint Cambridgeshire and Peterborough Health Protection Steering Group. To ensure that the shared membership fully protected confidentiality of any sensitive items discussed, a Confidentiality / Non-disclosure Agreement was included with the terms of Reference.

3. SURVEILLANCE

3.1 Notifications of Infectious Diseases

Doctors in England and Wales have a statutory duty to notify suspected cases of certain infectious diseases. These notifications along with laboratory and other data are an important source of surveillance data. The table below shows the main notifiable diseases reported to the Public Health England (PHE) Health Protection Team (HPT) from 2013 - 2016.

Table 1: Notifiable Diseases in Cambridgeshire 2013-2016

Notifiable Disease*	2013[†]	2014[†]	2015[†]	2016[†]
Acute infectious hepatitis	27	20	25	20
Acute meningitis	17	8	8	12
Enteric fever	<5	<5	<5	7
Food poisoning (excluding campylobacter**, but including the organisms below)	186	174	205	226
Botulism	0	0	<5	0
E coli O157 VTEC	6	<5	5	<5
Cryptosporidium	48	48	90	85
Giardia	24	13	16	22
Salmonella	95	92	80	101
Infectious bloody diarrhoea	8	6	5	11
Invasive group A streptococcal disease	13	23	18	20
Legionnaires' disease	<5	0	<5	6
Malaria	11	10	9	13
Measles*	53 (22)	23 (3)	13 (1)	17 (6)
Meningococcal septicaemia	7	<5	9	11
Mumps*	47 (23)	44 (15)	24 (2)	39 (3)
Rubella*	<5	11	5	5
Whooping cough	84	108	80	203

SOURCE: East of England HPT HPZone

* These are notifications of infectious disease and are not necessarily laboratory confirmed. Numbers in brackets indicate confirmed cases of mumps. There were no confirmed cases of measles or rubella.

[†] Because of the confidentiality risk associated with reporting very small numbers, where there are fewer than 5 cases they are reported as <5.

** During 2016, the HPT stopped importing laboratory reports of campylobacter into its HPZone database as public health follow up is not undertaken for individual cases and there is a national system for laboratory surveillance.

3.2 Pertussis (whooping cough)

There were 4535 cases of whooping cough notified in England and Wales in 2016, up from 3033 in 2015. Cambridgeshire had a higher rate of cases than the East of England with 23.48 per 100 000 population compared to 15.56 for the East of England. The median age of cases in Cambridgeshire was 43 (range: 0 – 84). 75% of cases were laboratory confirmed pertussis. Pertussis cases usually increase in the third quarter of each year and follow a recognised epidemiological pattern of 3 – 4 yearly cyclical peaks. Following the declaration of a national outbreak of pertussis in 2012, immunisation for pregnant women was introduced in October 2012.

3.3 Scarlet fever

Similar to the rest of the country, scarlet fever seasonal activity has remained elevated across Cambridgeshire. In 2016, there were 19,155 notifications of scarlet fever in England and Wales, an increase from 17,577 in 2015. This increase has also been seen locally in the East of England. In 2016, Cambridgeshire had a rate of 34.45 per 100 000 population and the East of England 29.44. The median age of cases of scarlet fever in Cambridgeshire is 4 years (range: 0 – 55). Most cases are reported in the under 10s which is consistent with previous years. Reporting peaked in March but has continued at higher than normal levels.

Although scarlet fever is usually a mild illness, patients can develop complications such as an ear infection, throat abscess, pneumonia, sinusitis or meningitis.

3.4 Outbreaks and Incidents

Table 2: Cambridgeshire, January - December 2016

Gastroenteritis	Healthcare-associated infection	Measles	Respiratory virus	TB	Scabies	Environmental/ Chemical
26*	4	2	1**	2†	1	2††

SOURCE: East of England HPT HPZone

* These include 19 care home norovirus outbreaks (5 laboratory confirmed and 14 suspected) and 3 food poisoning outbreaks

** Confirmed influenza A outbreak in a care home

† Two instances where TB screening was undertaken in a school setting following identification of a smear-positive TB case

†† Contained chlorine leak at a water treatment plant and a fire at a recycling plant

4.0 PREVENTION

4.1 IMMUNISATION PROGRAMMES

The tables below detail uptake of the various vaccination programmes over time and compared to the regional level of uptake. Overall uptake is steady or has increased for most of the childhood programmes and for the seasonal influenza vaccination programme, which appears to indicate some success from the work we have undertaken with partner organisations to improve uptake. The aim for all childhood

programmes is to achieve at least 95% uptake, the level which ensures Herd Immunity. However the target uptake as outlined in the Public Health Outcomes Framework is 90%

Herd immunity occurs when the vaccination of a significant portion of a population provides a measure of protection for individuals who have not developed immunity. It arises when a high percentage of the population is protected through vaccination, making it difficult for a disease to spread because there are so few susceptible people left to infect.

This can effectively stop the spread of disease in the community. It is particularly crucial for protecting people who cannot be vaccinated. These include children who are too young to be vaccinated, people with immune system problems, and those who are too ill to receive vaccines (such as some cancer patients).

Details of the UK vaccination programme and what each vaccine protects against are included at Appendix 1 at the end of this report.

4.1.1 Childhood Primary Vaccinations

**Table 3 - Diphtheria, Tetanus, Pertussis, Polio and Haemophilus Influenza B
12 months DTaP/IPV/Hib [target 95 %]**

	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	94.8	94.7	94.5	94.1
East Anglia	95.7	95.8	95.8	95.2
	Q1 2014/15	Q2 2014/15	Q3 2014/15	Q4 2014/15
Cambs	95.3	93.3	93.8	94.8
East Anglia	95.6	95.0	96.0	95.6
	Q1 2015/16	Q2 2015/16	Q3 2015/16	Q4 2015/16
Cambs	93.1	94.7	93.6	94.2
East Anglia	95.6	95.6	95.4	95.5
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	93.8	94.1		
East Anglia	95.0	95.2		

Source: COVER

Table 4 – Pneumococcal Vaccine

12 months PCV [target 95 %]				
	Q1 2013/4 %	Q2 2013/4 %	Q3 2013/14 %	Q4 2013/4 %
Cambs	93.9	93.9	94.0	93.1
East Anglia	95.3	95.4	95.3	95.6
	Q1 2014/5 %	Q2 2014/5 %	Q3 2014/15 %	Q4 2014/5 %
Cambs	95.1	92.9	93.4	94.6
East Anglia	95.3	94.6	95.8	95.3
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	92.9	94.4	93.7	94.6
East Anglia	95.4	95.4	95.5	95.6
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	94.3	94.3		
East Anglia	95.4	95.3		

Source: COVER

Table 5 - Diphtheria, Tetanus, Pertussis, Polio and Haemophilus Influenza B

24 months DTaP/IPV/Hib [target 95 %]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	95.0	94.9	95.1	95.1
East Anglia	97.1	96.8	96.3	96.6
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	94.5	94.5	95.6	94.4
East Anglia	96.4	96.6	96.9	96.4
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	95.6	93.3	93.6	93.5
East Anglia	96.5	95.7	96.2	96.0
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	93.7	95.4		
East Anglia	96.1	96.2		

Source: COVER

Table 6 - Pneumococcal vaccine

24 months PCV Booster [target 95 %]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	91.7	90.4	91.2	92.2
East Anglia	94.2	94.0	93.6	94.0
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	92.2	91.3	91.1	91.6
East Anglia	93.6	93.7	94.0	93.9
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	91.3	90.0	90.5	90.7
East Anglia	93.6	93.0	93.5	93.3
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	89.9	92.0		
East Anglia	92.9	94.3		

Source: COVER

Table 7– Haemophilus Influenza B and Meningococcus C

24 months Hib/Men C [target 95 %]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	89.6	92.0	92.3	92.6
East Anglia	94.2	94.6	94.1	94.2
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	91.9	91.5	91.8	91.5
East Anglia	93.9	93.7	94.0	91.5
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	91.9	89.4	90.2	91.0
East Anglia	93.8	92.5	93.4	93.3
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	89.6	92.0		
East Anglia	92.8	94.3		

Source: COVER

Table 8 – Measles, Mumps and Rubella

24 months MMR 1 [target 95%]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	89.2	90.2	90.6	91.6
East Anglia	92.6	92.9	93.0	93.5
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	90.8	90.6	90.2	91.4
East Anglia	93.1	93.2	93.3	93.5
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	91.7	89.1	90.2	91.0
East Anglia	93.4	92.3	93.1	93.4
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	89.4	91.6		
East Anglia	92.7	93.8		

Source: COVER

Table 9 - Diphtheria, Tetanus, Pertussis, Polio and Haemophilus Influenza B

5 years DTaP IPV Hib [target 95%]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	92.5	95.7	94.4	94.5
East Anglia	95.8	96.5	95.8	95.7
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	93.9	94.0	93.7	94.2
East Anglia	96.0	95.7	96.3	95.8
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	94.7	93.8	94.1	93.4
East Anglia	96.2	95.3	95.6	96.2
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	93.1	93.7		
East Anglia	96.0	96.9		

Source: COVER

Table 10 - Measles, Mumps and Rubella (first dose)

5 years MMR 1 [target 95%]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	90.8	93.5	92.4	92.3
East Anglia	93.6	94.4	93.9	93.8
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	91.3	90.7	90.8	91.3
East Anglia	94.1	93.5	94.2	94.1
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	92.3	90.9	91.4	93.2
East Anglia	94.2	93.1	93.8	95.2
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	92.4	93.7		
East Anglia	95.4	96.0		

Source: COVER

Table 11 - Measles, Mumps and Rubella (second dose)

5 years MMR 2 [target 95 %]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	83.3	87.7	86.4	86.6
East Anglia	87.5	90.4	88.3	88.6
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	85.7	84.1	83.9	85.6
East Anglia	89.5	89.4	89.8	89.7
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	89.8	84.7	84.8	84.9
East Anglia	91.4	88.8	89.4	90.8
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	82.7	83.8		
East Anglia	88.2	89.8		

Source: COVER

Table 12 - Diphtheria, Tetanus, Pertussis, Polio

5 years DTaP/IPV Booster [target 95 %]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	84.4	89.2	87.7	88.0
East Anglia	89.3	91.7	89.7	90.1
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	88.7	85.3	85.0	86.3
East Anglia	91.1	90.1	90.8	90.7
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	85.7	85.4	86.0	84.5
East Anglia	90.7	89.5	90.4	89.0
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	82.6	82.1		
East Anglia	87.6	88.7		

Source: COVER

Table 13 - Haemophilus Influenza B and Meningococcus C

5 years Hib/Men C [target 95 %]				
	Q1 2013/14 %	Q2 2013/14 %	Q3 2013/14 %	Q4 2013/14 %
Cambs	83.5	93.6	92.1	91.7
East Anglia	91.5	94.3	92.8	92.6
	Q1 2014/15 %	Q2 2014/15 %	Q3 2014/15 %	Q4 2014/15 %
Cambs	90.6	90.7	89.9	91.2
East Anglia	93.4	92.7	93.1	91.2
	Q1 2015/16 %	Q2 2015/16 %	Q3 2015/16 %	Q4 2015/16 %
Cambs	91.3	90.0	90.6	89.5
East Anglia	93.1	93.0	92.9	92.2
	Q1 2016/17 %	Q2 2016/17 %	Q3 2016/17 %	Q4 2016/17 %
Cambs	87.6	88.6		
East Anglia	91.2	93.4		

Source: COVER

<https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2013-to-2014-quarterly-figures>

<https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2014-to-2015-quarterly-data>

<https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2015-to-2016-quarterly-data>

4.1.2 Meningitis B

Meningitis B vaccine was introduced as part of the primary vaccination for infants, in **September 2015**. It is offered to all babies when they attend for their first and third routine vaccinations, at 2 months and at 4 months, with a booster offered at 12/13 months.

Table 14

12 months Men B [target 95%]				
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
Cambs	Data not collected	93.4		
East Anglia	Data not collected	93.7		

4.1.3 Men ACWY

Meningococcal ACWY was introduced following an increase in Men W infections. This is being delivered to adolescents by school immunisation providers. The 17-18 year old catch up offered through primary care started in August 2015, uptake in this catch up group has been disappointing.

Table 15 - School Immunisation Service – Men ACWY

Local Authority		Cambridgeshire County Council	England
Catch-up Cohort 1 – School Year 11 – MenACWY 15-16 year olds born between 1 September 1999 – 31 August 2000	Number of adolescents	6,767	540,312
	Number vaccinated with MenACWY up to 31 August 2016	5,081	387,787
	% vaccinated with MenACWY up to 31 August 2016	75.1	71.8
Routine Cohort 2 – School Year 10 – Men ACWY 14-15 year olds born between 1 September 2000 – 31 August 2001	Number of adolescents	6,544	270,383
	Number vaccinated with MenACWY up to 31 August 2016	5,435	208,759
	% vaccinated with MenACWY up to 31 August 2016	83.1	77.2
Routine Cohort 3 – School Year 9 – Men ACWY 13-14 year olds born between 1 September 2001 – 31 August 2002	Number of adolescents		303,740
	Number vaccinated with MenACWY up to 31 August 2016		255,302
	% vaccinated with MenACWY up to 31 August 2016		84.1

Source: Men ACWY vaccine coverage estimates 2015-16 schools from PHE.GOV

4.1.4 Seasonal Flu Vaccination

Flu vaccination uptake improved this year for most groups but especially for the younger at risk groups and for NHS staff. Nationally uptake dropped for the over 65's this flu season and this was mirrored in Cambridgeshire and Peterborough although the drop was very small. For at risk groups and pregnant women although the national target of 55% was not reached, there was a significant increase in uptake, in particular with pregnant women.

Table 16: Flu vaccination uptake by key groups

Area	Summary of flu vaccine uptake %					
	65 and over		Under 65 (at risk)		Pregnant women	
	2015/6	2016/7	2015/6	2016/7	2015/6	2016/7
Cambridgeshire & Peterborough CCG	72.4	72.1	42.7	47.2	32.2	46.7
East Anglia	71.3	71	42.8	47.1	36.7	47.9

Source: Seasonal influenza vaccine uptake amongst GP Patients in England Provisional monthly data for 1 September 2016 to 31 January 2017 by 'Old' Area Team and Clinical Commissioning Group PHE GOV.uk published 23rd Feb 2017

Table 17: Seasonal flu vaccination uptake by age 2, 3 and 4 year olds

Org Name	All aged 2 uptake Target 40-65%		All aged 3 uptake Target 40-65%		All aged 4 % uptake Target 40-65%	
	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
Cambridgeshire & Peterborough CCG	37	39.7	39.3	42.0	29.7	33.3
East Anglia Total	39.1	42.1	40.8	43.9	32.0	35.4

Seasonal influenza vaccine uptake amongst GP Patients in England Provisional monthly data for 1 September 2016 to 31 January 2017 By 'Old' Area Team and Clinical Commissioning Group PHE GOV.uk published 23rd Feb 2017

Table 18: Seasonal flu vaccination uptake by children in school years 1, 2 and 3

Locality & Year Group	Percentage uptake	Total % uptake incl. children immunised by GP
Cambridge		
Year 1	62.4	66.1
Year 2	58.4	62.1
Year 3	54.7	58.0

Source: Seasonal flu vaccine uptake in children of primary school age: 1 September 2016 to 31 January 2017 PHE published Feb 2017 GOV.uk

Table 19: Front line healthcare workers in Trusts

Org Name	% seasonal Flu doses given September 2015- February 2016	Seasonal Flu doses given 1 September 2016 – 31 January 2017	
		No.	%
Papworth Hospital NHS Foundation Trust	65.9	1138	75.4
Peterborough and Stamford Hospitals NHS Foundation Trust	63.0	2546	65.9
Cambridge University Hospital NHS Foundation Trust	53.5	5906	75.4
Hinchingbrooke Health Care NHS Trust	65.4	935	77.0
Cambridgeshire and Peterborough NHS Foundation Trust	61.9	1769	53.7
Cambridgeshire Community services NHS Trust	59.2	985	70.1
East of England Total	49.7	34054	64.5

4.1.5 Prenatal Pertussis Vaccination

In England, from April to September 2016, Pertussis vaccine coverage in pregnant women averaged 70%, 14% higher than the same period in 2015 (Figure 1). This increase is thought to be in part attributable to changes to the data extraction criteria from April 2016 and suggests coverage estimates prior to this may have been under-estimated. In addition, the extended eligibility criteria for the vaccine, available to women from 16 weeks of pregnancy since April 2016 (previously available from 28 weeks), would have started to impact coverage from September 2016, and may have contributed to the increase. Whilst the increase in uptake is great news, pertussis activity continues to be high in all age groups other than infants and therefore it remains really important that women get vaccinated at the recommended time, ideally between 20 and 32 weeks of pregnancy, as this is a safe and highly effective way to protect their baby from birth.

Please note that we receive joint data for the Cambridgeshire and Peterborough CCG (CP CCG) area from NHSE.

Table 20 – percentage uptake of prenatal Pertussis vaccination by eligible women

Pertussis	April 2015	May 2015	June 2015	July 2015
CP CCG	49.8	45.9	52.7	50.5
East Anglia	56.8	53.8	58.9	56.3
Pertussis	August 2015	Sept 2015	Oct 2015	Nov 2015
CP CCG	51.2	50.5	54.1	52.5
East Anglia	58.5	67.2	60.3	61.4
Pertussis	Dec 2015	Jan 2016	Feb 2016	March 2016
CP CCG	50.7	50.3	NA	NA
East Anglia	60.3	59.3	NA	NA
Pertussis	April 2016	May 2016	June 2016	July 2016
CP CCG	52.7	73.8	73.3	71.9
East Anglia	60.2	73.6	74.4	74.7
Pertussis	August 2016	Sept 2016	Oct 2016	Nov 2016
CP CCG	70.6	72.8	71.4	72.3
East Anglia	74.1	76.4	78.7	78.0
Pertussis	Dec 2016	Jan 2017	Feb 2017	March 2017
CP CCG	76.2	78.9	75.0	75.5
East Anglia	79.8	82.3	80.8	77.0

Source: Prenatal pertussis table vaccine coverage estimates April 15 to March 17
PHE.GOV.uk published 26th May 2017

4.1.6 Rotavirus Vaccination

Rotavirus is a highly infectious stomach bug that affects babies and young children. Infections are routinely reported in surveillance data provided by PHE which demonstrates the effectiveness of this programme as cases have dropped to tiny numbers since the vaccine was introduced.

Table 21: Rotavirus vaccination

12 months Rotavirus 2 doses [target 95%]				
	Q1 2016/17	Q2 2016/17		
Cambridgeshire	87.6	89.5		
East Anglia	92.5	92.6		

Source: COVER

4.1.7 School immunisation service

Human Papilloma Virus (HPV) This vaccine protects against cervical cancer. It is a family of viruses that is associated with cervical cancer cases. The vaccine used protects against the two types of HPV that are responsible for more than 70% of cervical cancer cases. The vaccine is offered to girls in the 12 to 13 age group and usually one dose is given in each of school years 8 and 9. Uptake is counted for the full school year, hence data being reported for the most recent full school year, 2015 – 16.

Diphtheria, Tetanus, and Polio vaccine and Men ACWY. In past years the school age boosters of Diphtheria, Tetanus, and Polio vaccine were given by GPs in Cambridgeshire, requiring the families and young people to make an appointment at a convenient time and resulting in very low uptake usually below 30%. With the introduction of the Men ACWY vaccine in school, NHS England issued a new contract for the school age immunisations to Cambridgeshire Community Services for all Cambridgeshire schools, resulting in a large increase in uptake.

Table 22: Data for end of school year 2015-16

	Target	Cambridgeshire
HPV vaccination by end of school year nine dose 1	90%	89%
HPV vaccination by end of school year nine dose 2	90%	87%
School leaver booster (Td/IPV) by end of school year 10.	80%	74%
Men ACWY by end of school year 10.	80%	83%
Men ACWY by end of school year 11.	80%	75%
Childhood Flu vaccination school years 1 and 2	60%	60%
Schools participating in the programme	100%	100%
Vaccine administration Training	100%	100%
Patient/ service user satisfaction.	85%	84%

4.1.8 Shingles

The data for the Shingles vaccination programme is shown in the table below. The data is up to end August 2016. This is the third year of the shingles vaccination programme in England and data from September 2015 to August

2016 shows a continued decline in coverage in the routine (70 year old) and catch up (78 years old) cohorts (from 61.8% in 2013/14 to 54.9% in 2015/16 and from 57.8% in 2014/15 to 55.5% in 2015/16, respectively). PHE note several factors may have contributed to the decline, including:

- difficulties in practices identifying the eligible patients – during busy influenza immunisation clinics
- lack of call/re-call in the service specification to allow mop up of those who missed immunisation during the flu season
- possible lowering of patients' awareness of the vaccine since its introduction in 2013.

PHE are promoting the need for shingles vaccine through professional channels and considering a range of possible approaches to simplify the programme and associated eligibility criteria.

Table 23: Shingles vaccination uptake

Annual data Shingles vaccine coverage estimates 1st Sept 2015-31st Aug 2016

Area	Vaccine coverage for the Routine Cohort since 2013			Vaccine coverage for the Catch-up Cohort since 2013		
	Registered Patients aged 70	Received Shingles vaccine		Registered Patients aged 78	Received Shingles vaccine	
		No of patients	% of patients		No of patients	% of patients
Cambridgeshire & Peterborough CCG	6704	3956	59.0%	4384	2585	59.0%
East Anglia Total			57.0%			58.3%

Annual data published by PHE.

4.1.9 BCG

All Trusts are now able to order the new BCG vaccine, Intervax, and have reinstated clinics within Maternity departments to ensure maximum usage of each vial of vaccine. A summary of the number of BCG vaccinations given to eligible babies under the age of 1 year is provided below. There is no national collection of BCG data in the absence of a reliable source for the denominator.

4.1.10 Immunisation Task and Finish Group

An Immunisation 'Task and Finish' group that was set up to identify the reasons for lower immunisation uptake for childhood immunisation reported 12 month ago and the group has continued to work to implement the recommendations. This has involved close working with GP practices in some areas with particularly low uptake.

Progress, includes, training local health connectors on immunisations; dispelling the myths; targeting practices with child immunisation waiting lists.; developing a pilot flag system for practices to identify children missing immunisations; and encouraging practices to run more open access immunisation clinics which have been demonstrated to improve access and increase uptake.

4.1.11 Project to improve flu vaccination uptake in pregnant women

In 2016, the Cambridgeshire Health Committee made funds available to Public Health to improve vaccination uptake. In consultation with NHSE and PHE, it was agreed that we would focus on flu vaccination uptake in pregnant women. It was agreed that we would investigate the effectiveness of certain interventions by GP practices to improve the uptake of seasonal influenza vaccination by pregnant women. The intervention was a personalised invitation from the GP by letter, text or e mail accompanied by the approved national advice leaflet on immunisations in pregnancy (either hard copy or the electronic link). For half of the women receiving the intervention, a follow up phone call would be made to them by a practice nurse. While it was desirable to run this as a randomised controlled trial, this was not possible as not all practices agreed to take part so we allocated the willing practices to the intervention group and the rest to the control group. The reason for choosing this intervention was that there was evidence in the past that personalised invitations for elective preventive activities works well, but modern systems used in the NHS do not allow for this approach. Detailed analysis of the data has not yet taken place as we have not yet got all the data. However initial evidence shows a very healthy increase in uptake. A full report will be made available to Health Committee members when the full data analysis has been completed.

4.1.12 The table below provides comparative figures for flu vaccination uptake by pregnant women in general practice for a number of local authority areas (statistical neighbours for Cambridgeshire) and for the past two vaccination seasons. This comparison of the provisional data at local authority level shows an increase in uptake of flu vaccination amongst pregnant women in Cambridgeshire of 15.4% from 2015-16 uptakes. The next highest increase amongst statistical neighbours is 6.8% in West Sussex.

Table 24: Seasonal flu vaccination uptake by pregnant women

Local Authority	2016/17	2015/16	change	Increase / decrease
Cambridgeshire	48.5	33.1	15.4	↑
Bath and NE Somerset	45.7	44.0	1.7	↑
Bedford	53.9	47.2	6.7	↑
Central Bedfordshire	53.0	49.2	3.8	↑
Gloucestershire	46.7	43.9	2.8	↑
Hampshire	50.1	47.6	2.5	↑
Hertfordshire	49.0	44.9	5.9	↑
Oxfordshire	52.7	49.6	3.1	↑
Hertfordshire	49.0	44.9	5.9	↑
West Berkshire	46.9	50.0	3.1	↓
West Sussex	46.2	40.8	6.8	↑
Wiltshire	44.0	43.0	1.0	↑
Peterborough (for information, not used for analysis in project)	39.1	28.1	11	↑

4.2 SCREENING PROGRAMMES

4.2.1 Antenatal and Newborn Screening

NHS England report to us for the Cambridgeshire and Peterborough areas jointly and data for both areas are included here for this programme.

From Q1 there have been some changes to the Key Performance Indicators (KPIs). The parameters for acceptable/achievable levels have been revised for some KPIs, resulting in some KPIs that may have been previously achieved, now moving to acceptable.

A new KPI FA2 has been introduced; Foetal Anomaly Screening coverage (at 18 to 20 weeks of pregnancy a Foetal Anomaly ultrasound examination is carried out) and is reported on for the first time with all Trusts able to report and achieving the achievable standard.

Key for following tables:

Cambridge University Hospital Foundation Trust

CUHFT

Peterborough and Stamford Hospital Foundation Trust

PSHFT

Hinchingbrooke Hospital Trust

HHT

Cambridgeshire Community Services

CCS

Cambridgeshire and Peterborough Partnership Foundation Trust

CPFT

Table 25: Ante-natal screening

Indicator	Standard	Achievable	Provider	2015-16				16/17	
				Q1	Q2	Q3	Q4	Q1	Q2
ID1 Antenatal HIV test coverage	>95%	99%	CUHFT	97.0	97.8	96.7	98.0	97.3	99.5
	>95%	99%	PSHFT	98.7	98.9	99.0	99.8	99.5	99.4
	>95%	99%	HHT	99.5	99.3	99.0	99.2	99.8	98.9
ID2 Hep B timely referral for women found to be Hepatitis B positive	>70%	99%	CUHFT	100	100	83.3	33.3	No case	100
	>70%	99%	PSHFT	66.7	85.7	100	75.0	50	No case
	>70%	99%	HHT	No case	100	100	No case	No case	100

Indicator	Standard	Achievable	Provider	2015-16				16/17	
				Q1	Q2	Q3	Q4	Q1	Q2
FA1 completion of lab request form	>97%	100%	CUHFT	99.8	99.5	99.5	98.9	99.2	98.8
	>97%	100%	PSHFT	98.0	97.6	98.4	98.7	99.6	97.3
	>97%	100%	HHT	98.9	97.6	98.6	98.7	99.1	97.7

New				16/17	
Indicator	Standard	Achievable	Provider	Q1	Q2
FA2: Foetal anomaly screening (18+0 to 20+6 foetal anomaly ultrasound) – coverage *	>90%	>95%	CUHFT	No data*	100
	>90%	>95%	PSHFT	No data*	98.6
	>90%	>95%	HHT	No data*	99.5

*New KPI

				2015-16				2016/17	
Indicator	Standard	Achievable	Provider	Q1	Q2	Q3	Q4	Q1	Q2
ST1 Antenatal sickle cell and thalassaemia screening – coverage	>95%	99%	CUHFT	97.3	98.0	97.6	96.9	91.4	98.5
	>95%	99%	PSHFT	96.4	95.6	96.3	99.5	99.7	97.8
	>95%	99%	HHT	98.5	98.5	98.4	99	98.9	99.0
ST2 Antenatal sickle cell and thalassaemia timeliness of test	>50%	75%	CUHFT	29.6	31.6	32.1	30.1	31.7	*43.3
	>50%	75%	PSHFT	67.2	70.2	67.9	68	69.1	65.5
	>50%	75%	HHT	No data	No data	No data	29.9	49.4	52.0
*ST2: women having a haemoglobinopathy screen within the optimum timeframe; remains an issue for Addenbrooke's. The screening and immunisation team will continue to closely monitor and note some improvement.									
ST3 Antenatal sickle cell and thalassaemia completion of FOQ	>95%	99%	CUHFT	89.8	80.2	96.9	77.3	76.6	*90.9
	>95%	99%	PSHFT	98.3	98.1	97.9	98.9	98.3	98.7
	>95%	99%	HHT	No data	No data	No data	96.8	98.6	97.5
*Issues around the reliability of the data for ST3 continue as the Trust has not had a robust mechanism in place to identify Addenbrooke's patients from Hinchingsbrooke patients. This has been addressed and it is hoped with the circulation of the new single blood form that the laboratory will be able to provide robust data									

Table 26: Newborn screening

Indicator	Standard	Achievable	Provider	2015-16				16/17	
				Q1	Q2	Q1	Q4	Q1	Q2
NB1 Newborn blood spot screening coverage	>95%	99.9%	CCS	98.0	98.0	98.1	99.4	98.1	98.2
			CPFT	98.5	98.5	99.7	99.7	99.6	99.5
NB2 Newborn blood spot screening avoidable repeats	<2%	0.5%	CUHFT	No data	2.7	2.7	4.9	2.4	*3.1
	<2%	0.5%	PSHFT	No data	1.3	2.5	3.0	1.8	1.4
	<2%	0.5%	HHT	No data	9.0	3.6	4.5	3.6	**2.1
*NB2- unnecessary repeat bloodspots remain red. Training has taken place to address issues around technique and individual performance. Although some improvement was evident for Q1; Q2 sees a rise to 3.1. SIT continue to monitor through the ANNB Programme board and also via contracting routes to drive quality and improvement. **Hinchingbrooke has an action plan in place to address performance on NB2. Excellent progress has been made in the past year and the data for Q2 is just 0.1% above the acceptable level.									
NB4 Newborn blood spot screening coverage- movers in	>95%	99.9%	CCS	80	78.6	89.5	72.7	88.2	*80.1
			CPFT	100	90.9	93.3	93.3	82.4	76.9

Movers in were all offered within the timeframe.

Indicator	Standard	Achievable	Provider	2015-16				16/17	16/17
				Q1	Q2	Q1	Q4	Q1	Q2
NH1 Newborn hearing screening coverage	>97%	99.5%	CUHFT		98.0	98.7	99.4	99.2	98.6
	>97%	99.5%	PSHFT		99.8	100		99.8	99.9
	>97%	99.5%	HHT	100	100	99.8	99.5	99.7	99.2
NH2 Newborn hearing screening timely referral for assessment	>90%	95%	CUHFT		78.9	72.7	94.1	77.8	*93.8
	>90%	95%	PSHFT		100	100		100	100
	>90%	95%	HHT	100	100	100	60	100	No case

*15/16 babies were seen within the timeframe and all were offered an appointment within the timeframe. Small numbers negatively impact on this KPI.

Indicator	Standard	Achievable	Provider	2015-2016				16/17	16/17
				Q1	Q2	Q3	Q4	Q1	Q2
NP1 Newborn and Infant Physical Examination-coverage newborn	>95%	99.5%	CUHFT	93.2	94.0	96.4	94.6	97.3	94.5
	>95%	99.5%	PSHFT	100	99.6	99.8	99.9	96.9	97.4
	>95%	99.5%	HHT	95.9	95.4	93.3	92.8	99.7	96.5
NP2 Newborn and Infant Physical Examination timely assessment	>95%	100%	CUHFT	57.1	0.0	50	75	100	*66.7
	>95%	100%	PSHFT	100	40.0	100	100	33.3	**50.0
	>95%	100%	HHT	No Cases	100	0	20	25	No Cases

*3 babies were referred for hip scan and 2 were scanned within the 2 week timeframe.

**2 out of 4 babies referred were seen within the 2 week timeframe and two were seen on day 16.

CUHFT had a QA visit on 19th January and have adopted an action plan in relation to the recommendations made, which is being monitored by NHS England through the programme board.

4.2.2 Programme Updates

4.2.2.1 Newborn hearing

A new national system Smart for Hearing (S4H) has been launched and went live on 1st December without any significant issues. A new screener qualification has been launched and this will be a mandatory requirement for all new unregistered staff from April 2017.

4.2.2.2 Non Invasive Prenatal Testing

It is likely that the new non- invasive screening test for Downs, Edwards and Patau's syndrome will be commissioned in 2018/19. The highly sensitive screening test will be offered to all women who have a high risk result following the combined test. It is expected that the rates of diagnostic procedures will fall as a result.

4.2.3 Cancer Screening programmes - Breast Screening

While uptake of breast screening is satisfactory in being above the minimum standard for this programme, it remains below the achievable standard. We will continue to closely monitor uptake.

Table 27: Breast screening data

% of eligible women who attend for screening (age 50-70)	Minimum standard	Achievable standard	Q1 2015-16	Q2	Q3	Q4	Q1 2016-17	Q2 2016-17
Cambridgeshire	≥70%	>80%			67.0	76.9	73.3	75.1
% of women first offered appt. within 36 months at CUHFT	≥90%	100%	98.89	99.37	99.52	99.23	99.47	98.9
% of women who attend for assessment within 3 weeks of attending for screening mammogram at CUHFT	90%	100%	87.01	84.04	87.43	90.36	93.64	93.0

4.2.3 Cancer Screening programmes - Cervical Screening

We have been advised by NHSE that actual uptake data for the cervical screening programme is only available annually although process data for the programme are available quarterly – see below. The most recent uptake data for Cambridgeshire shows that 72.2% of women aged 25 – 64 have taken up their invitation to be screened. The table below gives process data for the two labs that examine cervical samples for our population.

Table 28: Cervical screening data

	Achievable 100%		2015-16				2016-17	2016-17
Indicator	Standard	provider	Q1	Q2	Q1	Q4	Q1	Q2
CS4 14 day TAT. From date of test to anticipated receipt of result letter	98%	The Pathology Partnership(Newmarket)	90.4	99.47	99.79	59	70.3	*82
	98%	Peterborough and Stamford Hospital Foundation Trust	90.4	99.47	99.79	59	85.7	100

4.2.4 Cancer Screening programmes - Bowel Screening

Table 29: Bowel screening data

Cambridge Cancer Screening Centre							
	Standard	Q1 15-16	Q2 15-16	Q3 15-16	Q4 15-16	Q1 16-17	Q2 16-17
Uptake	52%	58.6	57.8	55.1	58.6	58.5	61.3
SSP waiting times	100% within 14 days	100	100	100	100	100	100
Diagnostic test waiting times	100% within 14 days	100	100	100	100	100	95.9
Peterborough and Hinchingsbrooke Screening centre							
Uptake	52%		57.8%	55.1%	58.6%	59.6%	
SSP waiting times	100% within 14 days		100%	100%	94.4%	100%	100%
Diagnostic test waiting times	100% within 14 days		94.3%	94.8%	76.3%	89.7%	87.6%

An additional programme for bowel screening called bowel scope involving a one-off endoscopic examination at age 55 is now up and running.

4.2.5 Adult and Young People Screening - Diabetic Eye Screening Programme

Diabetic retinopathy is one of the most common causes of sight loss among people of working age. It occurs when diabetes affects small blood vessels, damaging the part of the eye called the retina. Diabetic retinopathy doesn't usually cause any noticeable symptoms in the early stages. If retinopathy is detected early enough, treatment can stop it getting worse. Otherwise, by the time symptoms become noticeable, it can be much more difficult to treat. This is why the NHS Diabetic Eye Screening Programme was introduced. Uptake is good in this area, but ideally all those with diabetes should be screened.

Table 30: Diabetic Eye Screening

Diabetic Eye Screening- Cambridgeshire and Peterborough CCG through EA DESP								
KPI DE1 standard 70% uptake (% <i>screened out of the total offered</i>)	Q3 (14/15)* 79.6%	Q4 (14/15) 79.4%	Q1 (15/16) 78.5%	Q2 (15/16) 77.6%	Q3 (15/16) 78.3%	Q4 (15/16) 77.1%	Q1 (16/17) 85.7%	Q2 (16/17) 87.6%
KPI DE2 standard 70% results received issued within 3 weeks of screening	Q3 (14/15) 99.2%	Q4 (14/15) 98.9%	Q1 (15/16) 99.1%	Q2 (15/16) 99.4%	Q3 (15/16) 99.0%	Q4 (15/16) 99.0%	Q2 (15/17) 99.8%	Q2 (16/17) 99.7%
KPI DE3 standard 80% treatment within 4 weeks	94%	86%	83.3%	: 80%	85.7%	No data	80%	75%

4.2.6 Adult and Young People Screening - Abdominal Aortic Aneurysm (AAA) Screening annual data

The data in the table are as provided by NHSE, the indicator records the 'completeness of offer'.

Table 31

AAA			
KPI AA1 standard 90% (acceptable level) and 100% (achievable level) Annual data	14/15	15/16	16/17
	100%	99.9%	100%

Note: The data are for the combined Peterborough, Cambridgeshire and West Suffolk population

Table 32: Uptake data for 2015/16 are available as below for Cambridgeshire.

Eligible	No. offered	No. screened	No. declined	% offered	% coverage	% uptake	% declined
5765	5761	4727	212	99.9	82.0	82.1	3.68

Source: PHE website

5. HEALTHCARE ASSOCIATED INFECTION (HCAI) AND ANTIMICROBIAL RESISTANCE (AMR)

5.1 HCAI

During this period national mandatory reporting has remained in place for the organisms identified as MRSA bacteraemia (blood cultures) and Clostridium difficile (faecal samples).

- 5.1.1 There continues to be a zero tolerance to preventable infections with each individual case being reviewed, firstly using a root cause analysis (RCA) process followed by a scrutiny panel using a post infection review tool. Scrutiny panels bring together a wide range of professionals at each meeting and include Chief Nurses, Consultants, Microbiologists, Senior and junior ward staff, infection control nurses (both from the hospital and the Clinical Commissioning Group (CCG)).
- 5.1.2 Following national guidance and embedding it into local policies and practice provides evidence that the recognition, management and treatment of patients keeps them safe and prevents transmission to others. It is widely recognised that there are many risk factors which may lead to acquisition of such infections, however the time of this occurring is not able to be identified, but sometimes appropriate treatment for other illness predisposes the onset of symptoms.
- 5.1.3 Rates of infections have steadied over the past 2 years and are no longer maintaining a downward trend.
- 5.1.4 Nationally MRSA bacteraemia saw an increase of 2.4% in the number of cases between 2014/15 and 2015/16 but has fallen 81.6% since 2007/8. 2015/16 was the first increase since 2007/8. Assignment of cases is demonstrated in the table below:

Table 33

Assigned	National No. 2015/16	Local No. 2015/16	Local No. 2016/17
CCG	294	1	1
Trust	302	1	3
Third Party	223	8	4

- 5.1.5 At the time of writing there are 2 cases outstanding. Early findings suggest these may both be attributable to Trusts and brings the total number reported in 2016/17 to 11 cases.
- 5.1.6 NHS Midlands and East (of which we are part) has a notably low rate nationally of cases at 1.1 per 100,000 population.
- 5.1.7 Performance for 2016/17 would suggest that practice has deteriorated. The main cause for this has been contamination of blood culture specimens used to diagnose potential blood stream infection. This is generally a technique error at the time of taking the blood cultures.

- 5.1.8 Nationally the incidence of *Clostridium difficile* has reduced by 0.4% overall but since 2007/8 a reduction of 74.5%. Again the decline is not maintained and is being closely monitored. The number of cases reported by the local Trusts remains at the same level, however scrutiny panels have been able to identify between cases that have been well managed and those where learning needs to be applied. Removing cases from the local trajectory has seen the number removed increase and demonstrates embedding of practice that these could not have been prevented.
- 5.1.9 Data for 2016/17 is currently not available.
- 5.1.10 There is an anticipated change for 2017/18 for mandatory reporting of further organisms but it is unclear what that will entail at this time, but likely to add in reporting of *Escherichia Coli* (E coli).
- 5.1.11 In addition to these infections there have been challenges with e.g. respiratory illnesses which have led to some bay and ward closures. Situations were managed well and as always outbreak wash up meetings held. Norovirus (diarrhoea and vomiting) did find its way into hospitals and community settings but again, through embedding of expectations into practice, have been well managed.

5.2 **Antimicrobial Resistance**

Antimicrobial resistance has been identified as a national and international risk to human health by the Chief Medical Officer, World Health Organisation and the Government as a whole. Antibiotics are widely used with many patients in the UK failing to complete the prescribed course or demanding antibiotics for viral or self-limiting conditions. These factors contribute to the development of antimicrobial resistance. In addition, no new class of antibiotics has been developed by the pharmaceutical industry in recent years. Each year on European Antibiotic Awareness day in November these problems are highlighted in the media, social media and posters.

- 5.2.1 Managed by the Medicines Optimisation team, the focus has been on the national process of encouraging self-care choices and options in preference to visiting the GP. The CCG is working to the national quality premium however not meeting the requirements for two specific antibiotics. Prescribing data is provided for GPs each month and all practices see where these are and not just their own data. Some practices are using ScriptSwitch which takes into account the patient's clinical history. There is a countywide stewardship group working with Trusts and follows patients through. The team is hoping to help clinicians by a culture change to avoid prescribing unnecessarily. Social Media is helping to bring about this change.

6. **ENVIRONMENTAL HEALTH**

- 6.1.1 Environmental health has a strong focus on health protection and is a responsibility of city and district councils and unitary authorities. The roles of the environmental health staff in each council can vary considerably but most include:
- food safety and inspection of food premises
 - Health and safety.

- Statutory nuisance – including noise nuisance
 - Licensing
 - Contaminated land
 - issues around private sector housing and houses in multiple occupation
- 6.1.2 Food Safety, Health and Safety, Pollution Control, Licensing and Trading Standards are part of Regulatory Services. The purpose of the service is to carry out interventions to check compliance with legal requirements and where appropriate take enforcement action. The service also has a role supporting businesses to help them comply with the law. The work of Regulatory Services helps to keep people healthy and safe, reduces health inequalities and contributes to the national and local economy.
- 6.1.3 Some of this work includes food inspections, investigating food complaints and infectious diseases and regulating private water supplies. District and city councils operate the National Food Hygiene Rating scheme which helps consumers choose where to eat or shop for food by providing information about hygiene standards. .
- 6.1.4 Licensing staff regulate the carrying on of all licensable activities by the appropriate control of licensed premises, temporary events and personal licence holders. Areas of licensing include alcohol, gambling, pet shops, petroleum sites, tattooists and skin piercing, dangerous animals and adult entertainments.
- 6.1.5 Trading Standards deal with product safety, animal health and fair trading and credit. A Joint Eastern Region Illicit Tobacco Control Project aims to increase the understanding of and raise awareness of illicit tobacco. Roadshows have been carried out with detection dogs to show the public how they find concealments and with experts on hand to offer help to those who wish to quit smoking. The project will provide support visits to businesses, intelligence led surveillance and follow up investigations and will result in seizure operations and prosecutions where necessary.
- 6.1.6 Pollution control includes investigation of a wide range of statutory nuisances, air quality assessment, hoarding and infestations of vermin in domestic and commercial premises and the issuing of permits for industrial processes.
- 6.1.7 Air quality is a significant public health issue and responsibility for air quality rests with city and district councils but is not always within the remit of the environmental health staff in view of the major contribution of traffic to reducing air quality. A recent paper was presented to the Health Committee on air quality in Cambridgeshire, highlighting the main areas of concern and actions being taken.
- 6.1.8 Membership of the Health Protection Steering Group includes a senior environmental health lead from a district council, who meets regularly with colleagues in the other councils and reports, by exception, on environmental health issues

7. NATIONAL TUBERCULOSIS STRATEGY

7.1 Latent TB Identification Project

The aim of this project is to support the early diagnosis of Latent TB and offer treatment of active disease.

7.2 NHS England and Public Health England jointly published the collaborative tuberculosis strategy on 19 January 2015. NHS England has committed £10 million for the establishment of testing for, and treatment of, latent tuberculosis (TB) in new entrants from countries of high TB incidence. Public Health England has committed £1.5 million for the establishment of the national TB office and support teams to the nine TB control boards. It is likely that the majority of TB cases in the UK are the result of 'reactivation' of latent TB infection (LTBI), an asymptomatic phase of TB which can last for years. There is a 5% risk of a patient with LTBI developing active TB infection. LTBI can be diagnosed by a single, validated blood test and treated effectively with antibiotics, preventing TB disease in the future.

7.3 Following the publication of the national strategy a review of TB services was undertaken in Cambridgeshire and Peterborough. The key Epidemiological findings are summarised below and provide an overview of the impact of TB on the resident population of the CCG.

- There were 999 cases of TB reported in Cambridgeshire and Peterborough residents between 2004 and 2014. Peterborough had an average of 47 cases/year.
- Almost three quarters (73%) of TB cases between 2004 and 2014 were in non-UK born individuals.
- The most common countries of origin of TB cases in Cambridgeshire & Peterborough in the last three years were UK, India, Pakistan, Lithuania, East Timor and Kenya. PHE recommend screening people who were born in or who had spent >6 months in high TB incidence country (150 cases per 100,000 or more)

7.4 The eligibility criteria for the service are any new patient registering with a practice or retrospectively identified by the practice as being:

- Born or spent > 6 month in a country of high TB incidence
- Entered the UK within the last 5 years
- Aged 16-35 years
- No history of TB either treated or untreated
- Never screened for TB in the UK

7.5 Cambridgeshire and Peterborough Clinical Commissioning Group (CCG) led this work supported by representatives from

- Peterborough and Stamford Foundation Hospitals (PSHFT)
- 12 Greater Peterborough GP Practices
- 2 Cambridgeshire GP practices
- Public Health England (PHE)
- Cambridgeshire and Peterborough Foundation Trust
- Cambridgeshire County Council and Peterborough City Council, Public Health departments

- 7.6 GP Practices with a high crude rate of TB cases were identified by PHE. Of these, practices with a crude annual rate of active TB ≥ 20 cases/100,000 have been prioritised for the LTBI screening programme.
- 7.7 The project commenced in March 2016 and to date, 14 practices have signed up to deliver. Using a Local Enhanced Service (LES) and two other practices have also signed up for phase 2 of the project. Training was provided by Oxford Immunotec, the provider for blood sample analysis as part of the screening.
- 7.8 Practices are expected to identify new patients on registration. PHE have provided the CCG with materials and letters to support the project.
- 7.9 There is a comprehensive action plan to cover the communication and engagement elements of this project. This aims to:
- Raise awareness of Latent TB and the need for screening
 - Get people to visit their GP practice for screening
 - Get people to register with a practice if not already
 - To dispel myths and beliefs about TB
- 7.10 Communications work so far has included an article and social media posts targeted at encouraging prospective patients to come forward. These were sent to specific community contacts obtained through partnership working with Peterborough City Council Connectors, as well as posted from the CCG's social media channels.
- 7.11 News of the project and its progress has also been shared with stakeholders on the CCG Newsletter distribution list, as well as with GP members of the organisation. Press releases were issued in September and December 2016. King's Lynn FM provided radio coverage in October, and the December release was picked up by BBC Radio Cambridgeshire and BBC Look East. Look East's coverage was particularly in depth, focusing on TB as well as Latent TB, and aired in January 2017. Future engagement with prospective patients and the public is planned for later in 2017.
- 7.12 Practices identify patients and invite them for blood screening. Bloods are taken and sent off for testing. All those with positive results are seen and treated by Secondary Care Services

Table 34: ACTIVITY TO DATE

Activity	Data
Negative	264
Positives	38
Borderline negative	7
Borderline positive	9
Indeterminate	5
Non reportable insufficient cells	1
Assay not run	1
Total screened	325

Table 1: Activity to end of January 2017

- 7.13 This activity is higher than other pilot areas in the region. There has been a positive response by the Practices to the screening programme and the CCG is receiving positive feedback regarding the activity that is being seen and treated.
- 7.14 The CCG is intending to roll out to other practices and will continue to work closely with the existing practices to ensure they will identify and screen eligible people.
- 7.15 The CCG also held an event planned on World TB Day to raise the profile of the project further, at which material was provided to encourage non registered patients to come forward.
- 7.16 For 2017/18 the CCG will continue to support all the GP Practices involved, to continue with the Programme as we have a continued flow of new migrants into the area.
- 7.17 The CCG will also offer screening to the remaining CCG wide practices to ensure we capture eligible people who also reside in smaller rural areas due to the nature of local employment opportunities.

8. HEALTH EMERGENCY PLANNING

- 8.1 The County Council is a Category 1 responder under the terms of the Civil Contingencies Act 2004, as a result there is an emergency planning/Resilience team that works in partnership with other organisations to lead emergency planning and response for the council. Some additional responsibility for health emergency preparedness passed with the move of Public Health into local authorities. In their role within local authorities the DPH is expected to:
- Provide leadership to the public health system for health Emergency Preparedness, Resilience and Response (EPRR)
 - Ensure that plans are in place to protect the health of their population and escalate concerns to the Local Health Resilience Partnership (LHRP) as appropriate
 - Identify and agree a lead DPH within the Cambridgeshire and Peterborough Local Resilience Forum (CPLRF) area to co-Chair the LHRP
 - Provide initial leadership with PHE for the response to public health incidents and emergencies. The DPH will maintain oversight of population health and ensure effective communication with local communities.
- 8.2 Local Health Resilience Partnerships (LHRPs) provide strategic leadership for the health organisations of the LRF area and are expected to:
- Assess local health risks and priorities to ensure preparedness arrangements reflect current and emerging need
 - Set an annual EPRR work plan using local and national risk assessments and planning assumptions and learning from previous incidents
 - Facilitate the production and authorisation of local sector-wide health plans to respond to emergencies and contribute to multi-agency emergency planning

- Provide a forum to raise and address issues relating to health EPRR
- Provide strategic leadership to planning of responses to incidents likely to involve wider health economies e.g. winter capacity issues
- Ensure that health is represented on the LRF and similar EPRR planning groups
- Delegate tasks to operational representatives of member organisations in line with agreed terms of reference.

8.3 The Cambridgeshire and Peterborough Local Health Resilience Partnership (CP LHRP) is co-chaired by the NHS England Locality Director and the DPH for Cambridgeshire and Peterborough. Member agencies share responsibility for oversight of health emergency planning in this forum. It is for the CPLRF and/or the LHRP to decide whether LHRP plans should be tested through a multi-agency exercise to validate the plans. The DPH reports health protection emergency resilience issues to the LHRP on a regular basis. The DPH provides a brief update report on the activities of the LHRP to the HPSG to ensure sharing of cross cutting health sector resilience issues.

- The DPH has been supported in this work by a consultant in public health who co-chairs the Health and Social Care Emergency Planning Group (HSCEPG) with the Head of EPRR from the NHS England Midlands and East (East) and has oversight of all health protection issues. The function is supported by the shared Health Emergency Planning and Resilience Officer (HEPRO) based within Public Health. The HEPRO reports into the LHRP and the LRF through the DPH.
- The HSCEPG has membership from local acute hospitals, East of England ambulance service (EEAmb), community services, mental health services, social care services, other NHS funded providers, Public Health England and NHS England.
- The LHRP leads on the annual EPRR assurance process for NHS funded organisations. The aim is to assess the preparedness of the NHS, both commissioners and providers, against common NHS EPRR Core Standards.
- All NHS funded organisations have completed their self-assessment against the EPRR Core Standards for 2016/7. In addition to the general standards, this self-assessment included a deep dive on Business/Service Continuity with an emphasis on fuel. Papworth Hospital NHS FT and Cambridge & Peterborough FT attained full compliance. Cambridge University Hospitals NHS FT, Hinchingsbrooke Healthcare NHS Trust, Peterborough & Stamford Hospitals NHS FT, Cambridge Community Services NHS Trust, Cambridgeshire & Peterborough CCG, 111-Herts UK and NHS England East Locality attained substantial compliance. Work plans where required, are in place and are signed off at board level.

9.4 The LRF and LHRP priorities for this year are planning for pandemic influenza; excess deaths; mass casualty incidents; CBRN (chemical, biological, radiological and nuclear) incidents; and adverse weather including flooding.

9.5 The LRF held exercises to validate all planning for all upper tier COMAH (Control of Major Accident Hazards) sites in Cambridgeshire.

10. SUMMARY

This report has provided an update on all key areas of health protection for Cambridgeshire including

- Communicable disease surveillance including information on the increase in whooping cough cases and recent outbreaks in the area.
- Immunisations which show a steady state for some and a gradual increase in uptake of many childhood immunisations and of seasonal flu vaccination
- Screening in which there is continued low uptake of both breast and cervical screening.
- Healthcare associated infections and the work to reduce anti-microbial resistance
- The Environmental Health role in protecting health including pollution control.
- The national TB strategy and successful local implementation of some key areas of the strategy notably Latent TB Infection Screening (LTBI)
- Health emergency planning and the priorities for the coming year.

UK Vaccination programme

Age 2 months

5-in-1 (DTaP/IPV/Hib) vaccine – this single jab contains vaccines to protect against five separate diseases: diphtheria, tetanus, pertussis (whooping cough), polio and Haemophilus influenzae type b (Hib, a bacterial infection that can cause severe pneumonia or meningitis in young children)

Pneumococcal (PCV) vaccine – pneumococcus can cause various infections including pneumonia

Rotavirus vaccine - Rotavirus is a highly infectious stomach bug that typically strikes babies and young children. This is an oral vaccine

Men B vaccine – Meningococcus B is responsible for approximately 90% of meningitis in young children

Age 3 months

5-in-1 (DTaP/IPV/Hib) vaccine - second dose

Rotavirus vaccine - second dose

Age 4 months

5-in-1 (DTaP/IPV/Hib) vaccine - third dose

Pneumococcal (PCV) vaccine - second dose

Men B vaccine – second dose

Between 12 and 13 months

Hib/Men C booster - given as a single jab containing meningococcus C (another cause of meningitis) and Hib (fourth dose)

Measles, mumps and rubella (MMR) vaccine - given as a single jab. Measles, mumps and rubella are highly infectious conditions that can have serious, and potentially fatal, complications, including meningitis, swelling of the brain (encephalitis) and deafness. They can also lead to complications in pregnancy that affect the unborn baby, and can lead to miscarriage

Pneumococcal (PCV) vaccine - third dose

Men B vaccine – third dose

Age 2 to 7 years including school years 1, 2 and 3

Seasonal influenza (Flu) vaccine - given as a nasal spray and needs to be given annually – this programme is being gradually extended to include all children up to age 16 years.

3 years and 4 months, or soon after

Measles, mumps and rubella (MMR) vaccine, second dose

4-in-1 (DTaP/IPV) pre-school booster – given as a single jab containing vaccines against diphtheria, tetanus, whooping cough (pertussis) and polio

Around 12-13 years

HPV vaccine, which protects against the Human Papilloma Virus which causes cervical cancer, it is given to girls only – two jabs are given 6 – 12 months apart

Age 14 years

3-in-1 (Td/IPV) teenage booster - given as a single jab which contains vaccines against diphtheria, tetanus and polio

Men ACWY – School children aged 14 (year 9) are now offered this vaccination routinely and students going to university or college for the first time, including overseas and mature students up to the age of 25, are advised to contact their GP to have the Men ACWY vaccine, ideally before the start of or in the first few weeks of the academic year. Cases of meningitis and septicaemia (blood poisoning) caused by Men W bacteria are rising, due to a particularly deadly strain. The highest risk of meningitis is in the first year of university, particularly the first few months.

65 and over

Flu (every year)

Pneumococcal (PPV) vaccine

70 years

Shingles vaccine (from September 2013)

Vaccines for special groups

There are some vaccines that aren't routinely available to everyone on the NHS but which are available for people who fall into certain risk groups, such as pregnant women, people with long term health conditions and healthcare workers. These extra vaccines include **hepatitis B vaccination, TB vaccination and chickenpox vaccination.**