

# Respiratory Diseases Profile

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# CONTENTS

<b>CONTENTS</b>	<b>2</b>
Introduction	3
Prevalence and trends	4
Chronic obstructive pulmonary disease (COPD)	4
Asthma	7
Nearest Neighbours	10
Risk factors	12
Age	12
Smoking	12
Air pollution	15
Occupational exposures	16
Deprivation	16
Prevention	19
Primary care	19
Smoking Cessation	19
Early intervention and monitoring	20
Flu vaccinations	22
Secondary care (hospital admissions)	24
RightCare Pathway: COPD	32
NHS Rightcare Commissioning for value – Respiratory (April 2016)	33
Additional data sources	34
Mortality	35
Deaths from Respiratory Disease	35
Deaths from COPD	39

## Introduction

This Respiratory disease profile has been requested by the Cambridgeshire and Peterborough Clinical Commissioning Group (C&P CCG) in order that key data for respiratory diseases can all be found in one place. Respiratory disease is one of the main causes of death for Cambridgeshire and Peterborough residents, accounting for 2,825 deaths in 2015-17 (13% of all C&P CCG deaths)<sup>1</sup>.

Chronic respiratory diseases are diseases of the airways and other structures of the lung. Some of the most common are chronic obstructive pulmonary disease (COPD), asthma, occupational lung diseases and pulmonary hypertension<sup>2</sup>. This respiratory diseases profile primarily focuses on COPD and asthma, as these are two key causes of morbidity and mortality in C&P CCG, as well as nationally.

COPD is estimated to affect around 1.1 million people in England (all ages), around 1.9% of the population. The same data source estimates prevalence in Cambridgeshire and Peterborough CCG to be 1.7% of the population. This is just over 16,500 people<sup>3</sup>.

Asthma is estimated to affect almost 3.5 million people in England (all ages), around 5.9% of the population. The same data source estimates prevalence in Cambridgeshire and Peterborough CCG to be 6.0% of the population. This is just under 58,000 people<sup>4</sup>.

Tobacco smoke is a widely documented risk factor for respiratory diseases. Other risk factors include air pollution, occupational chemicals and dusts, and frequent lower respiratory infections during childhood. Although respiratory diseases are not curable, several forms of treatment that help dilate major air passages and improve shortness of breath can help control symptoms and increase the quality of life for people with the disease<sup>5</sup>.

### **Chronic Obstructive Pulmonary Disease (COPD)**

COPD is a group of lung conditions including bronchitis and emphysema which affect breathing. It usually develops because of long-term lung damage, often from tobacco smoking, and predominantly affects people aged over 35 years (NHS, BLF).

### **Asthma**

Asthma is a common chronic lung disease characterised by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency person to person. Asthma affects people of all ages, but it often starts in childhood. Asthma is under-diagnosed and under-treated (NHS, WHO).

NHS – Overview COPD

<https://www.nhs.uk/conditions/chronic-obstructive-pulmonary-disease-copd/>

NHS – Overview asthma

<https://www.nhs.uk/conditions/asthma/>

British Lung Foundation - COPD (chronic obstructive pulmonary disease)

[www.blf.org.uk](http://www.blf.org.uk)

WHO – Chronic respiratory diseases – Asthma <https://www.who.int/respiratory/asthma/en/>

<sup>1</sup> Cambridgeshire County Council Public Health Intelligence (NHS Digital Primary Care Mortality Database).

<sup>2</sup> WHO, Chronic respiratory diseases <http://www.who.int/respiratory/en/>

<sup>3</sup> Quality and Outcomes Framework (QOF), NHS digital 2017/18

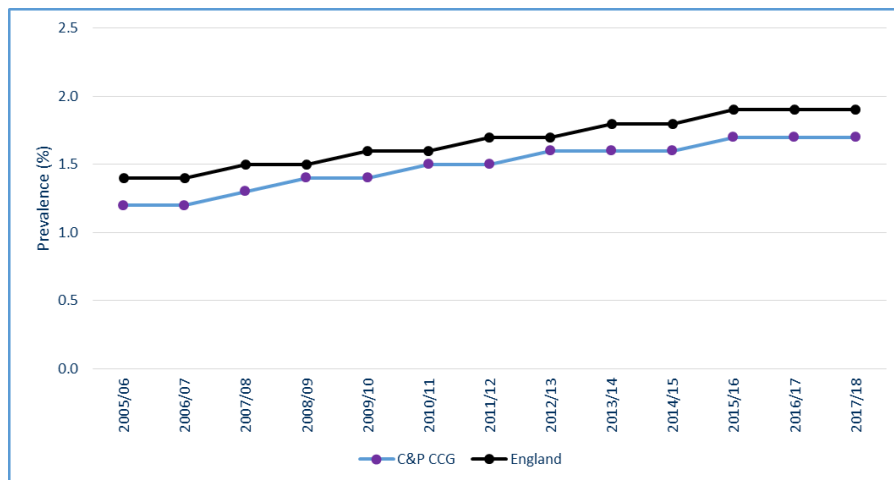
<sup>4</sup> Quality and Outcomes Framework (QOF), NHS digital 2017/18

<sup>5</sup> WHO, Chronic respiratory diseases <http://www.who.int/respiratory/en/>

## Prevalence and trends

### Chronic obstructive pulmonary disease (COPD)

#### GP recorded prevalence of COPD 2005/06 - 2017/18, Cambridgeshire and Peterborough CCG



Notes: COPD defined as patients on the practice register with chronic obstructive pulmonary disease (COPD)

QOF prevalence data is GP recorded and not age standardised.

'Blue-Orange-blue' colour scheme used as this indicator is assessed as higher/lower than the benchmark, rather than better/worse as per the alternative 'Red-Amber-Green' rating.

Statistically significantly higher than the England average
Statistically similar to the England average
Statistically significantly lower than the England average

**Source:** Quality and Outcomes Framework (QOF), NHS digital

#### Key points:

- COPD prevalence has steadily increased for C&P CCG, and England, between 2005/06 and 2015/16, but the last two years have seen more stability.
- In 2005/06 prevalence of COPD was 1.2% for C&P CCG. This has increased to 1.7% in 2017/18. 1.7% of the population is approximately 16,500 people.
- Prevalence of COPD is statistically significantly lower in C&P CCG compared to the national average.

## GP recorded prevalence of COPD by CCG Neighbourhood Team, all ages, 2013/14 – 2017/18, Cambridgeshire and Peterborough CCG

Neighbourhood Team	Registrations (number)					Prevalence (%)				
	2013/14	2014/15	2015/16	2016/17	2017/18	2013/14	2014/15	2015/16	2016/17	2017/18
01 NT - Cambridge East	593	572	593	593	593	1.5	1.4	1.4	1.4	1.4
02 NT - Cambridge City North	858	895	927	949	971	1.3	1.4	1.4	1.4	1.4
03 NT - Cambridge South Villages	654	687	705	740	768	1.2	1.2	1.2	1.3	1.3
04 NT - Cambridge North Villages	732	803	830	873	885	1.5	1.6	1.6	1.7	1.7
05 NT - Cambridge City South	414	419	433	436	459	0.9	0.8	0.8	0.8	0.8
06 NT - Cambridge City	493	517	555	543	549	0.9	0.9	0.9	0.9	0.9
07 NT - Huntingdon Central	1,035	1,081	1,127	1,139	1,201	1.8	1.9	1.9	1.9	2.0
08 NT - St Ives	738	810	848	893	920	1.4	1.6	1.6	1.7	1.7
09 NT - St Neots	948	1,009	1,053	1,056	1,091	1.8	1.8	1.9	1.9	1.9
10 NT - Isle of Ely	1,243	1,347	1,414	1,464	1,526	1.6	1.8	1.8	1.9	1.9
11 NT - Fenland	1,208	1,210	1,252	1,279	1,327	2.6	2.6	2.6	2.7	2.8
12 NT - Wisbech	1,179	1,211	1,262	1,323	1,369	2.5	2.5	2.6	2.6	2.7
13 NT - Peterborough City 1	1,132	1,163	1,211	1,256	1,315	1.5	1.4	1.4	1.4	1.5
14 NT - Peterborough City 2	852	839	837	825	803	2.6	2.5	2.6	2.5	2.4
15 NT - Borderline	1,653	1,712	1,809	1,893	1,964	1.8	1.9	1.9	1.9	1.9
16 NT - Borderline Central	688	724	756	758	772	1.4	1.5	1.5	1.5	1.5
C&P CCG	14,420	14,999	15,612	16,020	16,513	1.6	1.6	1.7	1.7	1.7
England	1,004,920	1,034,578	1,066,471	1,087,908	1,113,417	1.8	1.8	1.9	1.9	1.9

Notes: COPD defined as patients on the practice register with chronic obstructive pulmonary disease (COPD)  
QOF prevalence data is GP recorded and not age standardised.

	Statistically significantly better than the C&P CCG/England average
	Statistically similar to the C&P CCG/England average
	Statistically significantly worse than the C&P CCG/England average

**Source:** Quality and Outcomes Framework (QOF), NHS digital

### Key points:

- Between 2013/14 and 2017/18 the prevalence of COPD in C&P CCG has been statistically significantly lower than England, however within the C&P CCG neighbourhood team areas prevalence varies in terms of statistical significance and numerical values.
- In 2017/18 seven neighbourhood teams have a prevalence of COPD that is statistically significantly higher than the C&P CCG average. This was unchanged since 2015/16, and in some of these areas the prevalence appears to be increasing.

**Practices with a GP recorded prevalence rate of COPD which is statistically significantly higher than the Cambridgeshire and Peterborough CCG average, 2017/18**

GP Practice	Neighbourhood Team	Registrations	Prevalence (%)	CI Lower	CI Upper
Alconbury and Brampton	07 NT - Huntingdon Central	219	2.2	2.0	2.6
Almond Road, St Neots	09 NT - St Neots	161	2.2	1.9	2.6
Arbury Road, Cambridge	02 NT - Cambridge City North	260	2.1	1.8	2.3
Boroughbury Medical Centre	14 NT - Peterborough City 2	651	2.6	2.4	2.8
Bottisham	04 NT - Cambridge North Villages	137	2.3	2.0	2.7
Bretton Medical Practice	13 NT - Peterborough City 1	279	2.3	2.1	2.6
Cambridge Access Surgery	06 NT - Cambridge City	27	4.8	3.3	6.8
Cedar House, St Neots	09 NT - St Neots	265	2.0	1.8	2.3
Cherry Hinton Med Centre	02 NT - Cambridge City North	212	2.0	1.7	2.3
Church St, Somersham	08 NT - St Ives	67	3.2	2.5	4.0
Clarkson Surgery, Wisbech	12 NT - Wisbech	348	3.0	2.7	3.3
Cornerstone Practice, March	11 NT - Fenland	271	3.0	2.6	3.3
Cottenham	04 NT - Cambridge North Villages	84	2.2	1.8	2.7
Cromwell Place, St Ives	08 NT - St Ives	240	2.2	1.9	2.4
Eaton Socon	09 NT - St Neots	265	2.3	2.0	2.5
Fenland Group Practice	11 NT - Fenland	355	3.0	2.7	3.4
George Clare, Chatteris	11 NT - Fenland	308	2.5	2.2	2.8
Mercheford House, March	11 NT - Fenland	235	3.8	3.3	4.3
Moat House, Warboys	08 NT - St Ives	136	2.1	1.7	2.4
North Brink, Wisbech	12 NT - Wisbech	536	2.7	2.5	3.0
Nuffield Road, Cambridge	02 NT - Cambridge City North	282	2.0	1.8	2.2
Oundle	15 NT - Borderline	223	2.0	1.8	2.3
Parson Drove	12 NT - Wisbech	154	2.3	2.0	2.7
Priory Fields, Huntingdon	07 NT - Huntingdon Central	271	2.3	2.0	2.6
Queen St, Whittlesey	15 NT - Borderline	414	2.2	2.0	2.4
Ramsey Health Centre	07 NT - Huntingdon Central	199	2.8	2.4	3.2
Soham	10 NT - Isle of Ely	421	2.1	1.9	2.3
St George's	10 NT - Isle of Ely	252	2.3	2.0	2.6
St Mary's, Ely	10 NT - Isle of Ely	367	2.4	2.2	2.6
Sutton	10 NT - Isle of Ely	139	2.3	2.0	2.8
Trinity Surgery, Wisbech	12 NT - Wisbech	331	2.7	2.4	3.0
Wansford	15 NT - Borderline	188	2.5	2.1	2.8
Yaxley	16 NT - Borderline Central	321	2.0	1.8	2.2
C&P CCG		16,513	1.7	1.7	1.7
England		1,113,417	1.9	1.9	1.9

Notes: COPD defined as patients on the practice register with chronic obstructive pulmonary disease (COPD)

QOF prevalence data is GP recorded and not age standardised.

CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance.

**Source:** Quality and Outcomes Framework (QOF), NHS digital

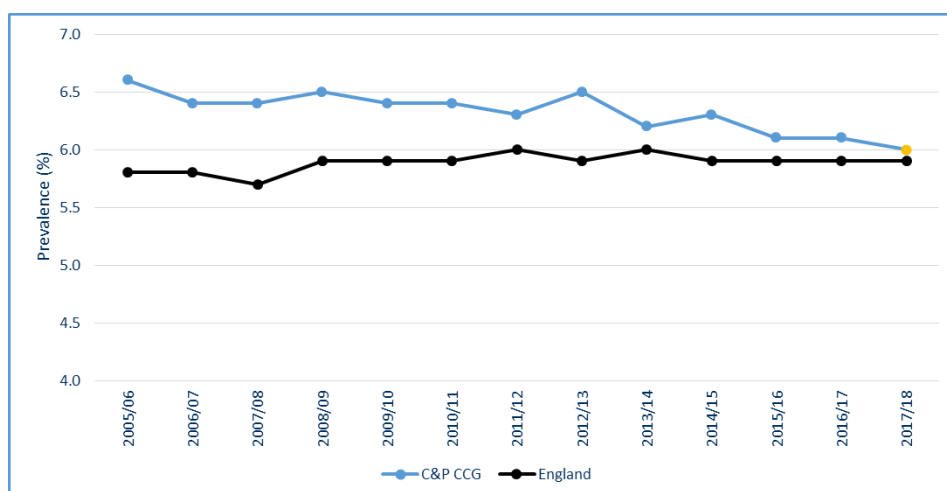
**Key points:**

- 33 GP practices have a prevalence of COPD which is statistically significantly higher than the C&P CCG average.
- These GP practices encompass most of the neighbourhood team areas.
- Excluding Cambridge Access Surgery due to its focus on providing services to the homeless community, the GP practice with the highest numerically recorded prevalence of COPD is Mercheford House, March, Fenland, 3.8% (confidence intervals 3.3-4.3%)<sup>6</sup>.
- The GP practice with the highest recorded number of patients with COPD is Boroughbury Medical Centre (Peterborough City 2, 651 registrations, note this is now part of the Octagon practice group).

<sup>6</sup> Other GP practices may have a truly higher prevalence of COPD when confidence intervals are considered.

## Asthma

### GP recorded prevalence of asthma 2005/06 - 2017/18, Cambridgeshire and Peterborough CCG

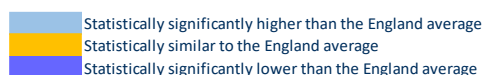


Notes: Asthma defined as patients on the practice register with asthma, excluding patients with asthma who have not been prescribed asthma-related drugs in the preceding 12 months.

QOF prevalence data is GP recorded and not age standardised.

Please note the vertical axis starts at 4.0, not zero.

'Blue-Orange-blue' colour scheme used as this indicator is assessed as higher/lower than the benchmark, rather than better/worse as per the alternative 'Red-Amber-Green' rating.



**Source:** Quality and Outcomes Framework (QOF), NHS digital

#### Key points:

- Asthma prevalence has shown a differing trend for C&P CCG compared to the national trend between 2005/06 and 2017/18.
- In 2005/06 prevalence of asthma was 6.6% for C&P CCG and 5.8% for England. This has decreased to 6.0% in C&P CCG in 2017/18, but increased to 5.9% for England. 6.0% of the C&P CCG population is just under 58,000 people.
- In 2017/18 prevalence of asthma was statistically similar in C&P CCG compared to the national average.

## GP recorded prevalence of asthma by CCG Neighbourhood Team, all ages, 2013/14 – 2017/18, Cambridgeshire and Peterborough CCG

Neighbourhood Team	Registrations (number)					Prevalence (%)				
	2013/14	2014/15	2015/16	2016/17	2017/18	2013/14	2014/15	2015/16	2016/17	2017/18
01 NT - Cambridge East	3,074	3,253	3,248	3,373	3,310	7.5	7.9	7.8	8.0	7.8
02 NT - Cambridge City North	3,696	3,783	3,809	3,860	3,823	5.7	5.7	5.7	5.6	5.5
03 NT - Cambridge South Villages	3,901	4,178	4,157	4,227	4,240	7.0	7.4	7.2	7.2	7.2
04 NT - Cambridge North Villages	3,212	3,370	3,476	3,540	3,510	6.6	6.8	6.8	6.9	6.8
05 NT - Cambridge City South	2,491	2,660	2,709	2,743	2,892	5.2	5.2	5.0	4.8	4.9
06 NT - Cambridge City	2,592	2,662	2,757	2,799	2,659	4.8	4.7	4.7	4.7	4.3
07 NT - Huntingdon Central	4,129	4,211	4,103	4,135	4,105	7.2	7.3	7.0	6.9	6.8
08 NT - St Ives	3,418	3,501	3,396	3,552	3,539	6.7	6.7	6.4	6.7	6.6
09 NT - St Neots	3,464	3,478	3,380	3,503	3,483	6.4	6.3	6.1	6.2	6.1
10 NT - Isle of Ely	4,762	5,284	5,181	5,536	5,492	6.3	6.9	6.6	7.0	6.9
11 NT - Fenland	3,483	3,585	3,551	3,579	3,553	7.6	7.7	7.5	7.5	7.5
12 NT - Wisbech	2,882	2,986	2,981	2,956	2,980	6.1	6.2	6.0	5.9	5.9
13 NT - Peterborough City 1	3,879	3,912	4,052	4,186	4,154	5.0	4.9	4.8	4.8	4.6
14 NT - Peterborough City 2	1,835	1,817	1,728	1,700	1,642	5.5	5.5	5.3	5.2	5.0
15 NT - Borderline	5,480	5,639	5,485	5,701	5,731	6.1	6.1	5.7	5.8	5.7
16 NT - Borderline Central	2,590	2,643	2,644	2,702	2,717	5.5	5.5	5.4	5.5	5.4
C&P CCG	54,888	56,962	56,657	58,092	57,830	6.2	6.3	6.1	6.1	6.0
England	3,340,484	3,402,437	3,400,679	3,444,218	3,463,893	5.9	6.0	5.9	5.9	5.9

Notes: Asthma defined as patients on the practice register with asthma, excluding patients with asthma who have not been prescribed asthma-related drugs in the preceding 12 months.

QOF prevalence data is GP recorded and not age standardised.

	Statistically significantly better than the C&P CCG/England average
	Statistically similar to the C&P CCG/England average
	Statistically significantly worse than the C&P CCG/England average

**Source:** Quality and Outcomes Framework (QOF), NHS digital

### Key points:

- Between 2013/14 and 2016/17 the prevalence of asthma in C&P CCG has been statistically significantly worse than England, however in 2017/18 it has reduced to a level statistically similar to England. Statistical significance status varies between the C&P CCG neighbourhood team areas.
- In 2017/18 seven neighbourhood teams have a prevalence of asthma that is statistically significantly higher than the C&P CCG average.
- Statistically, prevalence of asthma at the neighbourhood team level has remained fairly consistent in recent years, with most areas assessed as statistically significantly higher than C&P CCG in 2013/14 continuing to be higher in 2017/18.



**Practices with a GP recorded prevalence rate of asthma which is statistically significantly higher than the Cambridgeshire and Peterborough CCG average, all ages, 2017/18**

GP Practice	Neighbourhood Team	Registrations	Prevalence (%)	CI Lower	CI Upper
Alconbury and Brampton	07 NT - Huntingdon Central	739	7.6	7.1	8.1
Arbury Road, Cambridge	02 NT - Cambridge City North	860	6.8	6.4	7.3
Bottisham	04 NT - Cambridge North Villages	482	8.2	7.5	8.9
Buckden and Little Paxton	09 NT - St Neots	628	7.0	6.5	7.6
Burwell	10 NT - Isle of Ely	650	7.7	7.1	8.3
Cambridge Access Surgery	06 NT - Cambridge City	51	9.0	6.9	11.6
Charles Hicks, Huntingdon	07 NT - Huntingdon Central	1,065	7.6	7.2	8.1
Clarkson Surgery, Wisbech	12 NT - Wisbech	823	7.0	6.5	7.5
Comberton	03 NT - Cambridge South Villages	783	8.6	8.1	9.2
Cornerstone Practice, March	11 NT - Fenland	740	8.1	7.5	8.7
Cottenham	04 NT - Cambridge North Villages	306	7.9	7.1	8.8
Cromwell Place, St Ives	08 NT - St Ives	839	7.6	7.1	8.1
Fenland Group Practice	11 NT - Fenland	814	7.0	6.5	7.4
George Clare, Chatteris	11 NT - Fenland	878	7.1	6.6	7.5
Granta Medical Practices	01 NT - Cambridge East	3,310	7.8	7.5	8.0
Great Staughton	09 NT - St Neots	248	7.5	6.7	8.5
Haddenham	10 NT - Isle of Ely	534	7.3	6.8	8.0
Harston	03 NT - Cambridge South Villages	462	6.9	6.3	7.5
Kimbolton	09 NT - St Neots	461	7.1	6.5	7.7
Merchford House, March	11 NT - Fenland	531	8.5	7.8	9.2
Milton	04 NT - Cambridge North Villages	368	7.4	6.7	8.1
Nuffield Road, Cambridge	02 NT - Cambridge City North	975	6.9	6.4	7.3
Orchard Surgery, Melbourn	03 NT - Cambridge South Villages	539	6.8	6.3	7.4
Over	04 NT - Cambridge North Villages	318	6.8	6.1	7.5
Parkhall Surgery, Somersham	08 NT - St Ives	387	7.8	7.1	8.6
Parson Drove	12 NT - Wisbech	452	6.8	6.2	7.5
Ramsey Health Centre	07 NT - Huntingdon Central	474	6.7	6.1	7.3
Riverside Practice, March	11 NT - Fenland	590	7.2	6.7	7.8
Roysia Surgery, Royston	03 NT - Cambridge South Villages	554	8.6	8.0	9.4
Royston Health Centre	03 NT - Cambridge South Villages	835	7.1	6.7	7.6
Soham	10 NT - Isle of Ely	1,341	6.6	6.3	7.0
Spinney, St Ives	08 NT - St Ives	678	6.5	6.1	7.0
St George's	10 NT - Isle of Ely	849	7.6	7.2	8.1
St Mary's, Ely	10 NT - Isle of Ely	1,029	6.7	6.3	7.1
Sutton	10 NT - Isle of Ely	474	8.0	7.3	8.7
Swavesey	04 NT - Cambridge North Villages	202	6.9	6.0	7.9
Welland Medical Practice, Peterborough	13 NT - Peterborough City 1	307	7.5	6.7	8.4
Wellside Surgery, Sawtry	07 NT - Huntingdon Central	497	6.7	6.1	7.3
C&P CCG		57,830	6.0	5.9	6.0
England		3,463,893	5.9	5.9	5.9

Notes: Asthma defined as patients on the practice register with asthma, excluding patients with asthma who have not been prescribed asthma-related drugs in the preceding 12 months

QOF prevalence data is GP recorded and not age standardised.

CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance.

**Source:** Quality and Outcomes Framework (QOF), NHS digital

**Key points:**

- 38 GP practices have a prevalence of asthma which is statistically significantly higher than the C&P CCG average.
- These GP practices encompass most of the neighbourhood team areas.
- Excluding Cambridge Access Surgery due to its focus on providing services to the homeless community, the GP practices with the highest recorded prevalence of asthma are Comberton (8.6%, confidence intervals 8.1-9.2%) and Roysia Surgery, Royston (8.6%, confidence intervals 8.0-9.4%). These two practices are in the Cambridge South Villages neighbourhood team area.

- The GP practice with the highest number of patients with asthma is Granta Medical Practices (Cambridge East, 3,310 registrations). Granta Medical Practices is a collective of GP practices which were previously individual practices, which explains the substantially larger overall number of registrations compared to other GP practices (e.g a larger population base).

## Nearest Neighbours

### GP recorded prevalence of COPD, Cambridgeshire and Peterborough CCG and its most similar<sup>7</sup> CCGs, 2017/18

CCG	Neighbour Rank	Prevalence (%)	CI Lower	CI Upper
Oxfordshire	1	1.4	1.4	1.4
Nene	2	1.8	1.8	1.8
Gloucestershire	3	1.8	1.8	1.9
Northern, Eastern and Western Devon	4	2.1	2.1	2.1
Herts Valleys	5	1.4	1.4	1.4
Southern Derbyshire	6	1.9	1.9	2.0
East and North Hertfordshire	7	1.6	1.5	1.6
Dorset	8	2.1	2.1	2.1
Somerset	9	2.3	2.2	2.3
Bedfordshire	10	1.6	1.6	1.7
Cambridgeshire and Peterborough		1.7	1.7	1.7
England		1.9	1.9	1.9

Notes: CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance.

QOF prevalence data is GP recorded and not age standardised.

Neighbour rank – 1 to 10 ranked most similar CCGs to the C&P CCG based on multiple variables.

**Source:** Quality and Outcomes Framework (QOF), NHS digital

#### Key points:

- Compared to Oxfordshire (the most similar CCG), C&P CCG has a statistically significantly higher recorded prevalence of COPD.
- However, compared to the 10 CCGs ranked most similar to C&P CCG, C&P CCG appears to have a fairly numerically similar prevalence of COPD.

<sup>7</sup> An assessment of CCGs most similar to C&P CCG 2018, [fingertips.phe.org.uk](https://fingertips.phe.org.uk)

## GP recorded prevalence of Asthma, Cambridgeshire and Peterborough CCG and its most similar<sup>8</sup> CCGs, 2017/18

CCG	Neighbour Rank	Prevalence (%)	CI Lower	CI Upper
Oxfordshire	1	5.7	5.7	5.8
Nene	2	6.1	6.1	6.2
Gloucestershire	3	6.6	6.6	6.7
Northern, Eastern and Western Devon	4	6.7	6.7	6.8
Herts Valleys	5	5.4	5.3	5.4
Southern Derbyshire	6	6.3	6.3	6.4
East and North Hertfordshire	7	5.8	5.8	5.9
Dorset	8	6.8	6.7	6.8
Somerset	9	6.6	6.5	6.6
Bedfordshire	10	6.5	6.4	6.6
Cambridgeshire and Peterborough		6.0	5.9	6.0
England		5.9	5.9	5.9

Notes: CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance to C&P CCG rate.

QOF prevalence data is GP recorded and not age standardised.

Neighbour rank – 1 to 10 ranked most similar CCGs to the C&P CCG based on multiple variables.

**Source:** Quality and Outcomes Framework (QOF), NHS digital

### Key points:

- Compared to Oxfordshire (the most similar CCG), C&P CCG has a statistically significantly higher recorded prevalence of asthma.
- However, compared to the 10 CCGs ranked most similar to C&P CCG, C&P CCG appears to have a comparatively good prevalence of asthma, with 7 CCG's having recorded prevalence levels statistically significantly higher than the C&P CCG.

<sup>8</sup> An assessment of CCGs most similar to C&P CCG 2018, [fingertips.phe.org.uk](http://fingertips.phe.org.uk)

## Risk factors

### Age

Asthma is the most common chronic disease among children.<sup>9</sup>

COPD is more prevalent in older age groups. It is a slow developing condition, and symptoms tend to become a problem for many in mid-life, usually late 40s onwards.<sup>10</sup> Population forecasts show Cambridgeshire and Peterborough are expected to have substantial population growth in the older age groups.<sup>11</sup>

### Smoking

Smoking is a well-documented risk factor for respiratory disease and the main cause of COPD and is thought to be responsible for 9 in every 10 cases.<sup>12</sup> There are several sources of smoking estimates, some of which are highlighted in this section.

Prevalence of smoking has declined across the Cambridgeshire and Peterborough area in recent years, however, the rate of decline varies between areas and according to other variables. For example, smoking prevalence is known to be higher in areas with greater deprivation.<sup>13</sup> Prevalence is also higher in some specific demographic groups such as amongst lower social-economic classification<sup>14</sup> and adults with serious mental illness.<sup>15</sup> Each of these needs to be taken into consideration when exploring smoking as a risk factor.

#### Smoking prevalence at 15 years - current smokers, regular smokers and occasional smokers, Cambridgeshire and Peterborough, 2014/15

Area	% Current smokers <sup>1</sup>	% Regular smokers <sup>2</sup>	% Occasional smokers <sup>3</sup>	% E-cigarettes <sup>4</sup>	% Other <sup>5</sup>
Cambridgeshire	8.2	5.2	3.1	15.0	16.2
Peterborough	9.1	6.6	2.5	22.0	17.5
England	8.2	5.5	2.7	18.4	15.2

1. Regular smokers (>1 cigarette per week) and occasional smokers (smoke cigarettes sometimes)

2. Regular smokers (>1 cigarette per week)

3. Occasional smokers (<1 cigarette per week)

4. Have ever used/tried electronic cigarettes with the combination of currently, used to and tried e-cigarettes

5. "Have you ever used/tried other tobacco products (i.e. shisha pipe, hookah, hubble-bubble, waterpipe etc.?) with the combination of currently, used to use and tried other tobacco products.

**Source:** Public Health England, What About YOUth (WAY) Survey

<sup>9</sup> WHO – Asthma <https://www.who.int/respiratory/asthma/en/>

<sup>10</sup> Health and Safety Executive - About COPD <http://www.hse.gov.uk/copd/aboutus.htm>

<sup>11</sup> Cambridgeshire County Council Research Group

<sup>12</sup> NHS (2016) Overview - Chronic obstructive pulmonary disease (COPD) [online] Available form: <https://www.nhs.uk/conditions/chronic-obstructive-pulmonary-disease-copd/>

<sup>13</sup> Annual Population Survey (2017) – Smoking Prevalence in adults – current smokers

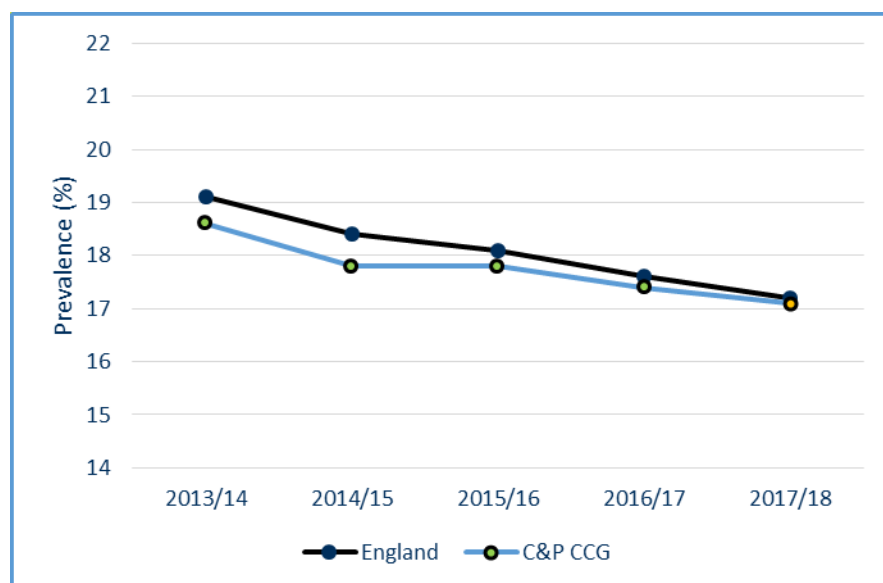
<sup>14</sup> ONS (2016) - Smoking by NS-Sec

<sup>15</sup> HSCIC 2014-15 Smoking Prevalence in adults with serious mental illness (SMI).

**Key points:**

- The percentage of 15 year olds that are current smokers, regular smokers, occasional and other smokers in both Cambridgeshire and Peterborough are statistically similar to the England average.
- In Cambridgeshire the percentage of E-cigarette smokers is statistically significantly lower than the England average and in Peterborough it is statistically significantly higher.

**Estimated Smoking Prevalence in adults (15+) 2013/14 – 2017/18, Cambridgeshire and Peterborough CCG**



QOF prevalence data is GP recorded and not age standardised.

**Source:** Quality and Outcomes Framework (QOF), NHS digital

**Key points:**

- Smoking prevalence has steadily decreased in recent years for C&P CCG and England.
- In 2013/14 estimated smoking prevalence in C&P CCG was 18.6%, this has reduced to 17.1% in 2017/18.
- Prevalence of 17.1% is approximately 136,500 people in C&P CCG.
- The estimated smoking prevalence in C&P CCG had been statistically significantly lower than the England average for each year between 2013/14 – 2016/17. Although smoking prevalence declined in 2017/18, C&P CCG is now statistically significantly similar to England due to further national decline.

**General practice (GP) recorded smoking prevalence in adults (15+), 2016/17**

Area	Percentage	Number of people
Cambridgeshire	15.7	92,109
Peterborough	24.3	40,083
<b>Cambridgeshire and Peterborough</b>	<b>17.6</b>	<b>132,192</b>
England	17.6	8,421,069

Data are not available at district Level and relate to patients recorded as smokers on GP clinical systems.

QOF prevalence data is GP recorded and not age standardised.

**Source:** Quality and Outcomes Framework (QOF), NHS digital

Key points:

- According to the QOF, smoking prevalence in adults 15+ is statistically significantly lower than the national average for Cambridgeshire, statistically significantly higher for Peterborough and statistically similar for Cambridgeshire and Peterborough as a whole.

**Smoking prevalence in adults (18+) – current smokers, 2017**

Area	number	%	CI lower	CI upper
Cambridge	17,290	17.0	6.5	27.5
East Cambridgeshire	10,624	15.3	8.9	21.8
Fenland	13,163	16.3	10.1	22.5
Huntingdonshire	19,590	14.0	9.1	18.8
South Cambridgeshire	13,721	11.3	7.4	15.2
Cambridgeshire	74,710	14.5	11.5	17.6
Peterborough	26,226	17.6	14.7	20.6
England	6,496,890	14.9	14.6	15.1

	Statistically significantly better than Cambridgeshire/England average
	Statistically similar to the Cambridgeshire/England average
	Statistically significantly worse than Cambridgeshire/England average

Districts are RAG-rated against Cambridgeshire, Cambridgeshire and Peterborough are RAG-rated against England average

**Source:** Annual Population Survey (APS), Local Tobacco Control Profiles, PHE

Key points:

- According to the APS, smoking prevalence in adults 18+ is statistically similar in Cambridgeshire, Peterborough and each of the districts to the average for England. The districts are also statistically similar when compared to the Cambridgeshire average. The districts are numerically different, with higher numerical prevalence in Cambridge and Fenland.

**Smoking prevalence in all adults and adults in routine and manual occupations (16-64 year olds), 2017**

Area	All			Routine and manual		
	%	Lower CI	Upper CI	%	Lower CI	Upper CI
Cambridgeshire	14.5	11.5	17.6	22.8	16.0	29.6
Peterborough	17.6	14.7	20.6	28.5	22.1	34.9
England	14.9	14.6	15.1	25.7	25.1	26.4

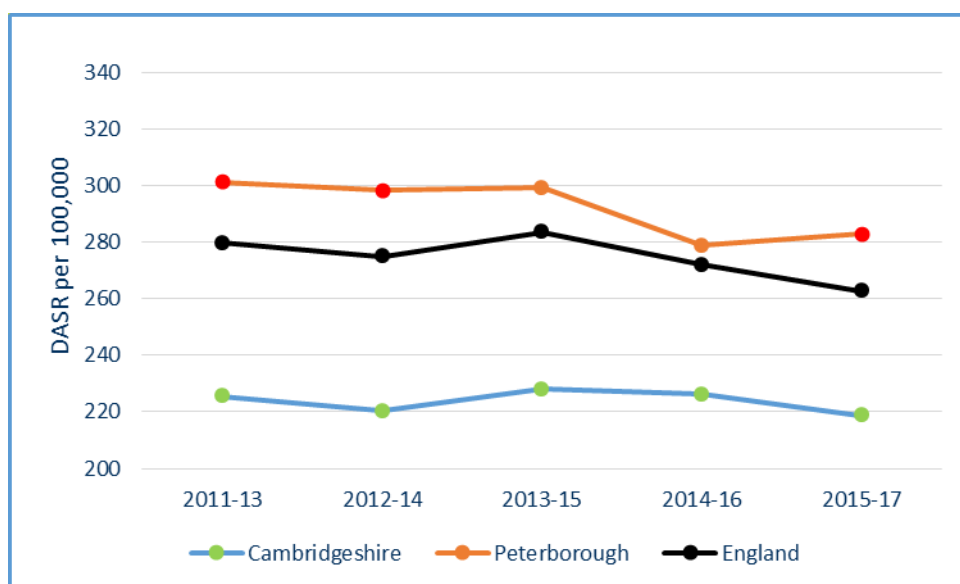
	Statistically significantly better than England average
	Statistically similar to the England average
	Statistically significantly worse than England average

**Source:** Annual Population Survey

Key points:

- According to the APS, the prevalence of smoking for all adults and for adults in routine and manual occupations in Cambridgeshire and Peterborough is statistically similar to the England average. However, numerically prevalence is higher in Peterborough.
- There is a higher prevalence of smoking among adults in routine and manual occupations than smoking among all adults in Cambridgeshire.
- Compared to all adults, the prevalence of smoking for adults in routine and manual occupations is statistically significantly higher in Peterborough.

## Smoking attributable mortality, Cambridgeshire, Peterborough, England, 2011-13 to 2015-17



DASR – Directly Age Standardised Rate

	Statistically significantly better than England average
	Statistically similar to the England average
	Statistically significantly worse than England average

**Source:** Local Tobacco Control Profiles, PHE

### Key points:

- Rates of smoking attributable mortality in Cambridgeshire have been statistically significantly better than England since 2011-13, whereas in Peterborough rates have been statistically significantly worse or statistically similar to England since 2011-13.

## Air pollution

Air pollution is a mixture of particles and gases that can have adverse effects on health. It is the largest environmental risk to the public's health and a known contributory cause of lung cancer and respiratory diseases.<sup>1617</sup>

Air pollution increases the chances of hospital admissions, visits to Emergency Departments and respiratory symptoms.<sup>18</sup>

High concentrations of air pollution can be found in most UK towns and cities, where sources of pollution, such as road traffic, are more concentrated.<sup>19</sup> This is reflected across Cambridgeshire and Peterborough, where hot spots of pollution have been identified as urban areas and arterial and trunk roads such as the A14.<sup>20</sup>

<sup>16</sup> DEFRA (2017) Air Quality: A Briefing for Directors of Public health [online] Available at: <https://laqm.defra.gov.uk/assets/63091defraairqualityguide9web.pdf> (Accessed 16 September 2018)

<sup>17</sup> Cambridgeshire Transport and Health JSNA (2015)

<sup>18</sup> DEFRA (2017) Air Quality: A Briefing for Directors of Public health [online] Available at: <https://laqm.defra.gov.uk/assets/63091defraairqualityguide9web.pdf> (Accessed 16 September 2018)

<sup>19</sup> British Lung Foundation (2017) Air Pollution [online] Available form: <https://www.blf.org.uk/support-for-you/air-pollution/what-is-it> (Accessed 11 October 2018).

<sup>20</sup> Cambridgeshire Transport and Health JSNA (2015)

## Occupational exposures

Occupational exposures to certain fumes and dust are thought to contribute to the causes of COPD and other respiratory diseases such as pneumonia, lung-disease and asthma.<sup>21,22</sup> Therefore an increased risk of COPD is associated with working in certain industries. These include (but are not limited to) agriculture, mining and construction.<sup>23</sup>

## Deprivation

### Mortality from respiratory disease by deprivation quintile of ward of residence, Cambridgeshire, 2015-17

Deprivation quintile	All ages		Under 75s	
	Number of deaths	DASR per 100,000	Number of deaths	DASR per 100,000
1 - Most deprived	557	143	138	42
2	459	119	106	30
3	395	112	73	22
4	393	100	83	24
5 - Least deprived	283	94	50	18
Cambridgeshire	2,087	114	450	27

DASR - Directly age-standardised rate

Note: mortality data is presented by local authority, not CCG.

	Statistically significantly better than the Cambridgeshire average
	Statistically similar to the Cambridgeshire average
	Statistically significantly worse than the Cambridgeshire average

**Source:** Cambridgeshire County Council Public Health Intelligence (NHS Digital Primary Care Mortality Database, ONS mid-year population estimates, 2015 Index of Multiple Deprivation).

#### Key point:

- The rates of all-age and under 75 mortality due to respiratory disease are statistically significantly higher than the Cambridgeshire average in the most deprived 20% of wards in the county and statistically significantly lower in the least deprived 20% of wards in the county.

<sup>21</sup> Health and Safety Executive COPD causes – occupations and substances  
<http://www.hse.gov.uk/copd/causes.htm>

<sup>22</sup> Health and Safety Executive – prevent work-related lung disease <http://www.hse.gov.uk/lung-disease/index.htm>

<sup>23</sup> As above



## Mortality from respiratory disease by deprivation quintile of ward of residence, Peterborough, 2015-17

Deprivation quintile	All ages		Under 75s	
	Number of deaths	DASR per 100,000	Number of deaths	DASR per 100,000
1 - Most deprived	186	164	56	54
2	175	180	37	45
3	146	154	36	39
4	117	122	30	32
5 - Least deprived	50	118	14	32
Peterborough	674	151	173	42

DASR - Directly age-standardised rate

Note: mortality data is presented by local authority, not CCG.

	Statistically significantly better than the Peterborough average
	Statistically similar to the Peterborough average
	Statistically significantly worse than the Peterborough average

**Source:** Cambridgeshire County Council Public Health Intelligence (NHS Digital Primary Care Mortality Database, ONS mid-year population estimates, 2015 Index of Multiple Deprivation).

### Key point:

- The rates of all-age and under 75 mortality due to respiratory disease are statistically similar to the Peterborough average for all deprivation quintiles in Peterborough.

## COPD prevalence 2017/18 in Cambridgeshire and Peterborough CCG, by Index of Multiple Deprivation (IMD) 2015 quintile

Deprivation quintile	Registrations	Prevalence (%)	CI Lower	CI Upper
1 - Most deprived	4,910	1.97	1.91	2.02
2	3,984	2.11	2.05	2.18
3	2,968	1.51	1.45	1.56
4	2,239	1.42	1.36	1.48
5 - Least deprived	2,412	1.39	1.33	1.44
C&P CCG	16,513	1.71	1.68	1.73
England	1,113,417	1.91	1.90	1.91

Note: Quintile – where the population is divided into five equal groups, with the most deprived 20% (fifth) appearing in the ‘most deprived’ quintile and so on.

QOF prevalence data is GP recorded and not age standardised.

	Statistically significantly better than the C&P CCG/England average
	Statistically similar to the C&P CCG/England average
	Statistically significantly worse than the C&P CCG/England average

**Source:** Quality and Outcomes Framework (QOF), NHS digital and Index of Multiple Deprivation 2015, DCLG

### Key points:

- C&P CCG has a prevalence rate of COPD which is statistically significantly better than England. However, this appears to vary with levels of deprivation.
- C&P CCG areas which are categorised into the most deprived quintiles have a prevalence of COPD which is statistically significantly worse than the C&P CCG average.
- This compares to the prevalence of COPD in areas categorised into the three least deprived quintiles in C&P CCG, where prevalence of COPD is statistically significantly better than the C&P CCG average.

## Asthma prevalence 2017/18 in Cambridgeshire and Peterborough CCG, by Index of Multiple Deprivation (IMD) 2015 quintile

Deprivation quintile	Registrations	Prevalence (%)	CI Lower	CI Upper
1 - Most deprived	13,262	5.31	5.22	5.40
2	12,122	6.43	6.32	6.54
3	10,722	5.44	5.34	5.54
4	10,196	6.47	6.35	6.59
5 - Least deprived	11,528	6.62	6.50	6.74
C&P CCG	57,830	5.98	5.93	6.03
England	3,463,893	5.93	5.93	5.94

Note: Quintile – where the population is divided into five equal groups, with the most deprived 20% (fifth) appearing in the 'most deprived' quintile and so on.

QOF prevalence data is GP recorded and not age standardised.

	Statistically significantly better than the C&P CCG/England average
	Statistically similar to the C&P CCG/England average
	Statistically significantly worse than the C&P CCG/England average

**Source:** Quality and Outcomes Framework (QOF), NHS digital and Index of Multiple Deprivation 2015, DCLG

### Key points:

- C&P CCG has a prevalence rate of asthma which is statistically similar to the England average. However, this appears to vary with levels of deprivation.
- C&P CCG areas which are categorised into the most deprived quintile have a prevalence of asthma which is statistically significantly better than the C&P CCG average.
- This compares to the prevalence of asthma in areas categorised into the least deprived quintile in C&P CCG, where prevalence of asthma is statistically significantly worse than the C&P CCG average.
- This data does not present a clear correlation between the five quintiles of deprivation and asthma prevalence, which may be of interest for further investigation as national trends often show stronger correlation.<sup>24</sup>

<sup>24</sup> British Lung Foundation, Asthma Statistics [online] Available from: <https://statistics.blf.org.uk/asthma>  
Asthma UK, Health Inequality and Asthma [online] Available from: <https://www.asthma.org.uk/support-us/campaigns/publications/inequality/>

## Prevention

The model of care for chronic respiratory conditions is preventative. It is important to prevent to reduce the level of exposure of individuals and populations to common risk factors. These include exposure to tobacco, poor nutrition, frequent lower respiratory infections during childhood, and environmental air pollution (indoor, outdoor, and occupational).<sup>25</sup>

## Primary care

### Smoking Cessation

Stopping smoking can help stop COPD, and other respiratory conditions, getting worse.<sup>26</sup> Smoking is the biggest preventable risk factor for respiratory diseases.<sup>27</sup>

Overall smoking prevalence is declining across C&P CGG. However, rates remain higher among certain demographic groups (e.g. adults in routine and manual occupations<sup>28</sup>) which may need consideration when focusing on reducing rates of smoking.

### Smoking cessation in Cambridgeshire and Peterborough, 2017/18

Indicator	Period	England (rate)	Cambs (rate)	Cambs (number)	Pboro (rate)	Pboro (number)
Number setting a quit date per 100,000 smokers*	2017/18	4,097	4,976	3,819	5,235	1,415
Successful quitters at 4 weeks per 100,000 smokers*	2017/18	2,070	2,723	2,090	3,241	876
Quitter (CO validated) at 4 weeks per 100,000 smokers*	2017/18	1,477	1,545	1,186	2,786	753
Completeness of NS-SEC recording by Stop Smoking Services (%)	2017/18	91.3%~	91.0%	3,476	100.0%	1,415
Cost per quitter (£)	2017/18	£519~	£638	1,332,491	£390	341,909

\*crude rate per 100,000 smokers 16+ years

~aggregated up from lower known geographies

**Source:** Public Health England Local Tobacco Control Profiles<sup>29</sup>

#### Key points:

- Overall, though not formally statistically assessed, 2017/18 smoking cessation performance in Cambridgeshire and Peterborough as a whole appears better than that in England.
- Cambridgeshire and Peterborough have numerically higher rates of CO validated smoking quitters compared with England, although the difference is not statistically tested.
- Cambridgeshire has a similar completeness rate of 91.0% for NS-SEC (social class) recording compared to England. Note, however, that Cambridgeshire Stop Smoking Services record data about routine and manual workers who stop smoking and geographic and GP based data to address inequalities. Peterborough has 100% completeness for NS-SEC (social class) recording.

<sup>25</sup> WHO strategy for prevention and control of chronic respiratory diseases (2002)

[https://www.who.int/respiratory/publications/crd\\_strategy/en/](https://www.who.int/respiratory/publications/crd_strategy/en/)

<sup>26</sup> NHS England, Causes – COPD <https://www.nhs.uk/conditions/chronic-obstructive-pulmonary-disease-copd/causes/>

<sup>27</sup> <https://www.gov.uk/government/news/chronic-smoking-related-lung-disease-blights-over-1-million-lives-in-england>

<sup>28</sup> Smoking Prevalence in adults in routine and manual occupations (18-64) - current smokers (Annual Population Survey) 2017

<sup>29</sup> Local Tobacco Control Profiles: Summary for Cambridgeshire and Peterborough, May 2018 available from

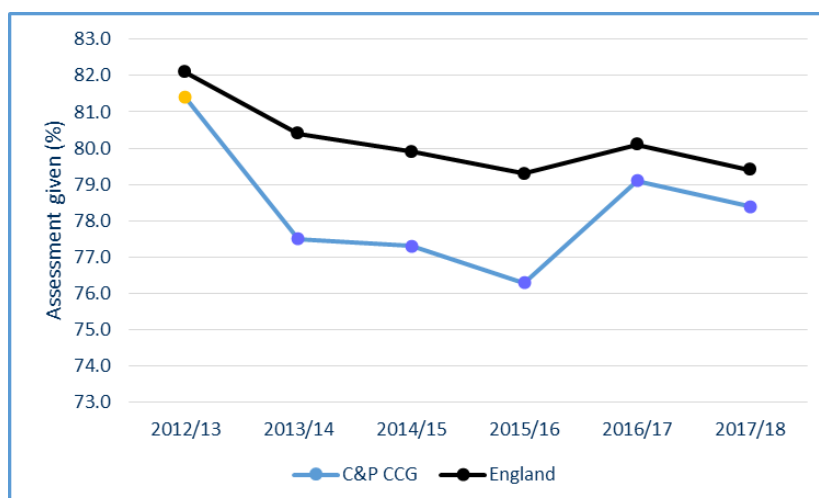
<https://cambridgeshireinsight.org.uk/health/topics/smoking/>

- Cambridgeshire's rate of successful 4 week quitters has remained similar between 2016/17 and 2017/18 (2,787 per 100,000 in 2016/17 and 2,723 per 100,000 in 2017/18). Peterborough's rate of successful 4 week quitters has increased during this period from 2,441 to 3,241 per 100,000. In contrast, nationally a decline was recorded (2,248 to 2,070 per 100,000).
- Between 2016/17 and 2017/18 the rate of CO validated quitters has declined in Cambridgeshire from 1,878 to 1,545 and nationally from 1,627 to 1,477 , but in Peterborough the rate has increased from 2,036 to 2,786 per 100,000 smokers.

## Early intervention and monitoring

COPD is increasingly recognised as a treatable disease with large improvements in symptoms, health status, exacerbation rates and even mortality if managed appropriately.<sup>30</sup>

### Percentage of COPD patients who have had an assessment of breathlessness using the MRC dyspnoea score in the preceding 12 months (COPD003).



Note: axis does not start at zero.

QOF prevalence data is GP recorded and not age standardised.

'Blue-Orange-blue' colour scheme used as this indicator is assessed as higher/lower than the benchmark, rather than better/worse as per the alternative 'Red-Amber-Green' rating.

Blue	Statistically significantly higher than the England average
Orange	Statistically similar to the England average
Blue	Statistically significantly lower than the England average

**Source:** Quality and Outcomes Framework (QOF), NHS digital

#### Key points:

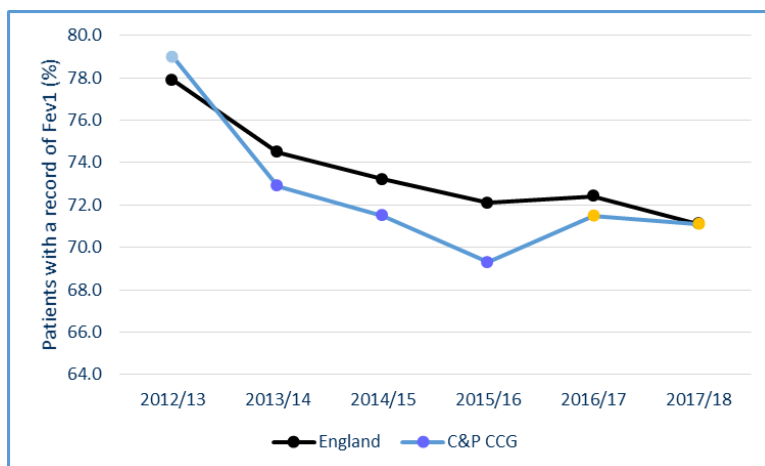
- The percentage of C&P CCG patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 12 months is statistically significantly lower than the England average in C&P CCG (78.4% compared to 79.4%), and has been so since 2013/14.

<sup>30</sup> PHE National General Practice Profiles Indicator Definitions and Supporting Information – COPD003 assessed using MRC dyspnoea score last 12mths. Available at: <https://fingertips.phe.org.uk/profile/general-practice/data#page/6/gid/2000006/pat/46/par/E39000031/ati/152/are/E38000026/iid/90611/age/1/sex/4>

- Between 2015/16 the 2016/17 there was an increase in the percentage of patients who received the assessment, but this appears to have fallen in 2017/18. England also saw an apparent decline in 2017/18.

There is a gradual deterioration in lung function in patients with COPD which accelerates with the passage of time. There are important interventions which can improve quality of life in patients with severe COPD. It is therefore important to monitor respiratory function in order to identify patients who might benefit from pulmonary rehabilitation or continuous oxygen therapy. NICE clinical guidelines recommend that FEV1 and inhaler techniques should be assessed at least annually for people with mild/moderate/severe COPD. The purpose of regular monitoring is to identify patients with increasing severity of disease who may benefit from referral for more intensive treatments/diagnostic review.<sup>31</sup>

#### Percentage of COPD patients with a record of FEV1 in the previous 15 months (COPD004)



Note: axis does not start at zero.

QOF prevalence data is GP recorded and not age standardised.

'Blue-Orange-blue' colour scheme used as this indicator is assessed as higher/lower than the benchmark, rather than better/worse as per the alternative 'Red-Amber-Green' rating.

	Statistically significantly higher than the England average
	Statistically similar to the England average
	Statistically significantly lower than the England average

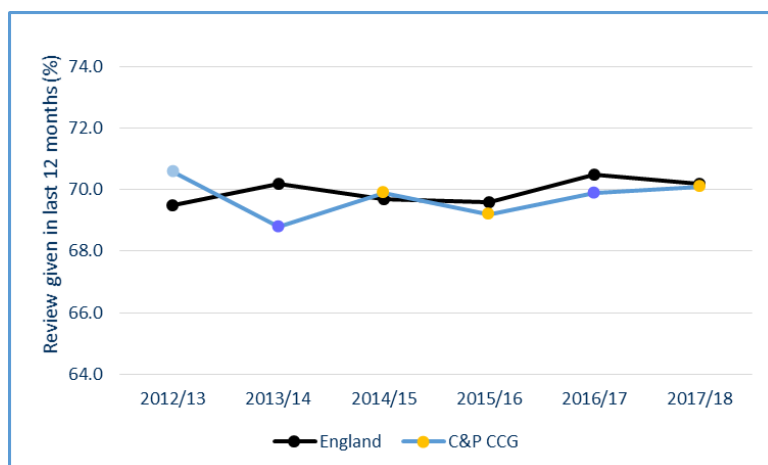
**Source:** Quality and Outcomes Framework (QOF), NHS digital

#### Key points:

- The percentage of C&P CCG COPD patients with a record of FEV1 in the previous 15 months is statistically similar to the national rate for the second year.
- Nationally figures appear to be in decline, although this is not statistically assessed.

<sup>31</sup> PHE National General Practice Profiles Indicator Definitions and Supporting Information – COPD004: Record of FEV1 in last 12mths. Available at: <https://fingertips.phe.org.uk/profile/general-practice/data#page/6/gid/2000006/pat/46/par/E39000031/ati/152/are/E38000026/iid/90610/age/1/sex/4>

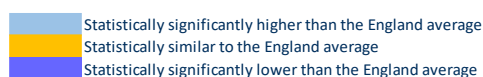
## Percentage of asthma patients who have had an asthma review in the last 12 months (incl. assessment using the 3 RCP questions) (AST003)



Note: axis does not start at zero.

QOF prevalence data is GP recorded and not age standardised.

'Blue-Orange-blue' colour scheme used as this indicator is assessed as higher/lower than the benchmark, rather than better/worse as per the alternative 'Red-Amber-Green' rating.



**Source:** Quality and Outcomes Framework (QOF), NHS digital

### Key points:

- The percentage of C&P CCG asthma patients who have had an asthma review in the last 12 months is statistically similar to the national rate.

## Flu vaccinations

The flu vaccination is offered to people who are at greater risk of developing serious complications if they catch flu, this includes those with chronic respiratory conditions.

Flu vaccination coverage across the Cambridgeshire and Peterborough authorities for those aged 65+ and for at risk<sup>32</sup> individuals is below the national uptake ambition of 75% for 65+ and 55% for at risk individuals, set by the NHS to reflect the World Health Organisations (WHO) target.<sup>33</sup> Cambridgeshire has a recent upward trend for flu vaccination coverage of 65+. Cambridgeshire rates (74.4% in 2017/18) remain below the national benchmark but are statistically significantly better than England (72.6%).

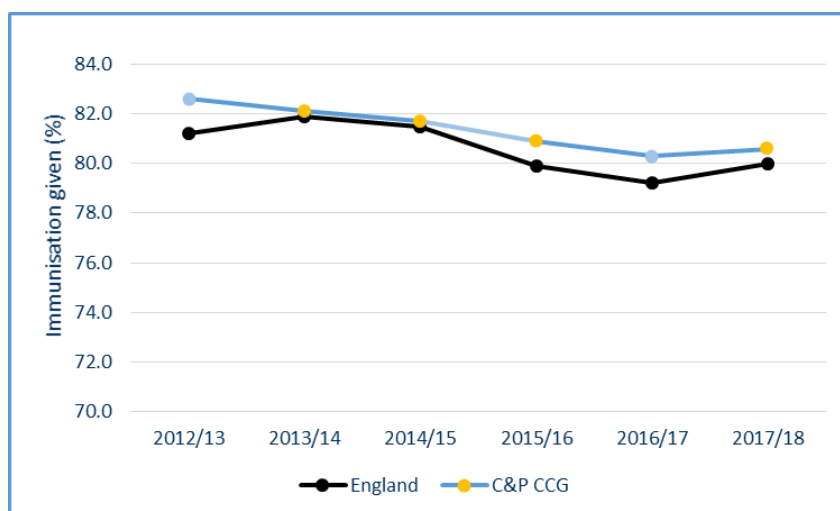
Peterborough has a recent downward trend of coverage among those aged 65+, however numerically coverage has increased in the last two years (from 68.5% in 2015/16 to 71.3% in 2017/18). Peterborough rates for 65+ coverage remain below the national benchmark set and are statistically significantly worse than England (72.8%).

<sup>32</sup> At risk includes clinical risk groups such as those with chronic respiratory conditions

<sup>33</sup> NHS England, The national flu vaccination programme 2019/20. <https://www.england.nhs.uk/wp-content/uploads/2019/03/annual-national-flu-programme-2019-to-2020-1.pdf>

Overall, there is a recent downward trend for flu vaccination coverage of at risk individuals for Cambridgeshire and Peterborough. However, numerically, Cambridgeshire, Peterborough, and England have seen slight increases in coverage in the last two years, although all three remain below the national benchmark goal. Cambridgeshire rates for at risk individuals are now statistically significantly better than England (49.8% compared to 48.9%).

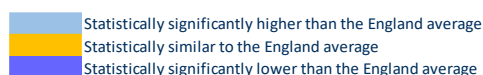
**Patients with COPD who have had influenza immunisation in the preceding 1 August to 31 March (Department of Health recommendation - COPD007).**



Note: axis does not start at zero.

QOF prevalence data is GP recorded and not age standardised.

'Blue-Orange-blue' colour scheme used as this indicator is assessed as higher/lower than the benchmark, rather than better/worse as per the alternative 'Red-Amber-Green' rating.



**Source:** Quality and Outcomes Framework (QOF), NHS digital

**Key points:**

- The Department of Health recommend COPD patients to have the influenza immunisation.
- Overall, rates in C&P CCG have fallen slightly in recent years from 82.6% in 2012/13 to 80.3% in 2016/17. 2017/18 saw a small numerical increase to 80.6%. England has followed a similar trend.
- Rates in C&P CCG are currently statistically similar to the England average (80.6% compared to 80.0%).

## Secondary care (hospital admissions)

### Hospital admission episodes for respiratory diseases – all admissions, Cambridgeshire and Peterborough CCG, 2017/18

Neighbourhood Team	All ages				Under 75s			
	Episodes	DASR per 100,000	CI Lower	CI Upper	Episodes	DASR per 100,000	CI Lower	CI Upper
Borderline	1,572	1,613.3	1,533.9	1,695.8	1,148	1,242.0	1,170.8	1,316.5
Borderline Central	780	1,788.9	1,659.1	1,925.8	561	1,204.9	1,103.2	1,313.1
City	641	1,553.5	1,428.1	1,686.5	463	1,072.1	969.9	1,181.4
City North	828	1,631.6	1,517.3	1,752.0	605	1,216.4	1,116.2	1,322.8
City South	545	1,284.1	1,171.7	1,403.9	403	939.1	842.8	1,042.8
East	543	1,228.7	1,127.0	1,337.2	346	877.3	786.9	975.3
Fenland	1,111	2,199.1	2,071.1	2,333.0	758	1,670.8	1,553.5	1,794.7
Huntingdon Central	1,236	2,160.3	2,040.7	2,285.0	863	1,570.7	1,467.2	1,679.7
Isle of Ely	1,071	1,390.3	1,307.9	1,476.5	734	1,018.1	945.5	1,094.7
North Villages	789	1,566.5	1,458.2	1,680.7	518	1,111.5	1,017.3	1,211.9
Peterborough City 1	1,284	1,873.6	1,758.5	1,993.6	1,061	1,371.9	1,282.4	1,465.5
Peterborough City 2	679	1,965.4	1,819.0	2,120.3	414	1,396.0	1,264.3	1,537.7
South Villages	877	1,570.1	1,466.6	1,679.0	587	1,085.1	998.0	1,177.8
St Ives	1,072	2,029.7	1,909.5	2,155.5	762	1,530.1	1,422.9	1,643.1
St Neots	1,139	2,038.9	1,921.5	2,161.7	800	1,490.1	1,388.3	1,597.5
Wisbech	1,114	2,207.8	2,079.5	2,341.9	780	1,681.9	1,565.5	1,804.5
C&P CCG	15,281	1,730.4	1,702.8	1,758.4	10,803	1,261.1	1,237.2	1,285.3

Note: Respiratory definition includes ICD10 codes J00-J99. DASR – Directly age standardised rate

	Statistically significantly better than the C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than the C&P CCG average

Source: HES

#### Key points:

- In 2017/18 there were almost 15,300 hospital admission episodes for respiratory conditions (all ages) across C&P CCG; this is an age standardised rate of 1,730.4 per 100,000 population.
- In 2017/18 there were just over 10,800 hospital admission episodes for respiratory conditions (under 75s) across C&P CCG, this is an age standardised rate of 1,261.1 per 100,000 population.
- The rate of hospital admissions varies across the neighbourhood team areas.
- Fenland, Huntingdon Central, St Ives, St Neots, and Wisbech have levels of hospital admission episodes for respiratory conditions which are statistically significantly higher (worse) than the C&P CCG average for all ages and under 75s.
- Peterborough City 1 and Peterborough City 2 have levels of hospital admission episodes for respiratory conditions which are statistically significantly higher (worse) than the C&P CCG average for all ages.



## Hospital admission episodes for respiratory diseases – elective admissions, Cambridgeshire and Peterborough CCG, 2017/18

Neighbourhood Team	All ages				Under 75s			
	Episodes	DASR per 100,000	CI Lower	CI Upper	Episodes	DASR per 100,000	CI Lower	CI Upper
Borderline	328	336.9	301.3	375.6	307	343.4	305.9	384.2
Borderline Central	164	345.3	292.7	404.4	147	321.6	270.4	379.5
City	192	402.8	342.9	469.6	168	353.3	297.5	416.0
City North	197	356.8	305.8	413.5	168	310.5	262.7	364.2
City South	164	341.6	286.5	403.5	143	298.4	247.0	356.5
East	165	382.3	325.8	445.7	139	353.8	297.0	418.1
Fenland	262	535.0	471.9	604.2	225	509.0	444.3	580.4
Huntingdon Central	305	527.9	470.0	590.9	260	482.8	425.6	545.4
Isle of Ely	330	419.3	375.1	467.2	292	403.6	358.5	452.9
North Villages	241	481.5	422.2	546.7	190	408.6	352.3	471.3
Peterborough City 1	245	319.9	277.1	366.9	234	315.8	273.5	362.4
Peterborough City 2	123	377.4	313.3	450.6	108	367.8	301.5	444.3
South Villages	290	503.9	446.8	566.2	254	473.1	416.0	535.8
St Ives	288	541.9	480.8	608.5	253	516.3	454.3	584.3
St Neots	321	571.1	510.1	637.5	266	507.5	448.1	572.5
Wisbech	197	391.8	338.8	450.7	160	349.5	297.3	408.2
C&P CCG	3,812	419.5	406.2	433.2	3,314	387.9	374.7	401.5

Note: Respiratory definition includes ICD10 codes J00-J99. DASR – Directly age standardised rate

	Statistically significantly better than the C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than the C&P CCG average

Source: HES

### Key points:

- In 2017/18 there were just over 3,800 elective hospital admission episodes for respiratory conditions (all ages) across C&P CCG; this is an age standardised rate of 419.5 per 100,000 population.
- In 2017/18 there were just over 3,300 elective hospital admission episodes for respiratory conditions (under 75s) across C&P CCG, this is an age standardised rate of 387.9 per 100,000 population.
- The rate of hospital admissions varies across the neighbourhood team areas.
- Fenland, Huntingdon Central, South Villages and St Ives have levels of elective hospital admission episodes for respiratory conditions which are statistically significantly higher (worse) than the C&P CCG average for all ages and under 75s.
- St Neots has levels of elective hospital admission episodes for respiratory conditions which are statistically significantly higher (worse) than the C&P CCG average for under 75s.

## Hospital admission episodes for respiratory diseases – emergency admissions, Cambridgeshire and Peterborough CCG, 2017/18

Neighbourhood Team	All ages				Under 75s			
	Episodes	DASR per 100,000	CI Lower	CI Upper	Episodes	DASR per 100,000	CI Lower	CI Upper
Borderline	1,228	1,260.0	1,189.8	1,333.2	828	884.2	824.6	947.0
Borderline Central	612	1,432.3	1,315.0	1,556.9	411	874.8	788.4	967.8
City	447	1,145.6	1,036.6	1,262.5	294	716.6	632.3	808.4
City North	624	1,258.7	1,157.8	1,365.8	434	898.8	812.0	992.1
City South	375	933.7	837.0	1,038.1	254	631.0	551.0	718.8
East	372	831.6	748.8	921.0	202	510.1	441.9	585.7
Fenland	837	1,640.0	1,530.3	1,755.5	525	1,144.5	1,048.3	1,247.1
Huntingdon Central	914	1,602.2	1,499.3	1,710.3	594	1,072.5	987.5	1,162.8
Isle of Ely	730	956.5	888.1	1,028.9	431	598.5	543.2	658.0
North Villages	542	1,073.5	984.2	1,168.7	324	694.1	620.1	774.4
Peterborough City 1	1,036	1,548.8	1,442.6	1,660.0	824	1,050.6	972.5	1,132.7
Peterborough City 2	554	1,582.1	1,451.9	1,720.8	306	1,028.2	915.9	1,150.5
South Villages	585	1,062.6	977.1	1,153.4	332	610.0	545.3	680.2
St Ives	771	1,464.2	1,362.2	1,571.7	498	992.3	906.8	1,083.7
St Neots	813	1,458.0	1,358.8	1,562.5	532	978.9	897.2	1,066.0
Wisbech	907	1,795.6	1,680.1	1,916.9	611	1,312.5	1,210.1	1,421.1
C&P CCG	11,347	1,296.7	1,272.7	1,321.1	7,400	862.4	842.7	882.5

Note: Respiratory definition includes ICD10 codes J00-J99. DASR – Directly age standardised rate

	Statistically significantly better than the C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than the C&P CCG average

Source: HES

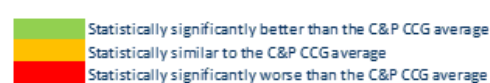
### Key points:

- In 2017/18 there were more than 11,300 emergency hospital admission episodes for respiratory conditions (all ages) across C&P CCG; this is an age standardised rate of 1,296.7 per 100,000 population.
- In 2017/18 there were 7,400 emergency hospital admission episodes for respiratory conditions (under 75s) across C&P CCG, this is an age standardised rate of 862.4 per 100,000 population.
- The rate of hospital admissions varies across the neighbourhood team areas.
- Fenland, Huntingdon Central, Peterborough City 1, Peterborough City 2, St Ives, St Neots and Wisbech have levels of emergency hospital admission episodes for respiratory conditions which are statistically significantly higher (worse) than the C&P CCG average for all ages and under 75s.

## Hospital admission episodes for respiratory diseases – all admissions, Cambridgeshire and Peterborough CCG, 2013/14 - 2017/18



Note: Respiratory definition includes ICD10 codes J00-J99. DSR – Directly age standardised rate



Source: HES

Key points:

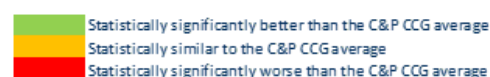
- The rate of hospital admissions varies across the neighbourhood team areas.
- Fenland, Huntingdon Central, Peterborough City 2, St Ives, St Neots and Wisbech have levels of hospital admission episodes for respiratory conditions (all ages) that are statistically significantly higher than the C&P CCG average in 2017/18.

## Hospital admission episodes for respiratory diseases by deprivation quintile – all admissions, Cambridgeshire and Peterborough CCG, 2017/18

Deprivation quintile	All ages				Under 75s			
	Episodes	DSR per 100,000	CI Lower	CI Upper	Episodes	DSR per 100,000	CI Lower	CI Upper
1 - Most deprived	4,662	1,970.5	1,913.0	2,029.2	3,376	1,449.6	1,400.1	1,500.4
2	3,140	1,905.3	1,838.0	1,974.3	2,253	1,430.8	1,352.1	1,471.4
3	2,743	1,685.8	1,622.5	1,750.9	1,895	1,176.4	1,123.6	1,231.0
4	2,022	1,490.3	1,425.2	1,557.7	1,466	1,110.3	1,053.5	1,169.4
5 - Least deprived	2,714	1,490.3	1,434.5	1,547.6	1,813	1,070.6	1,021.8	1,121.1
C&P CCG	15,281	1,730.4	1,702.8	1,758.4	10,803	1,261.1	1,237.2	1,285.3

Note: Respiratory definition includes ICD10 codes J00-J99. DSR – Directly age standardised rate

Quintile – where the population is divided into five equal groups, with the most deprived 20% (fifth) appearing in the ‘most deprived’ quintile and so on.



Source: HES

Key points:

- The most deprived 20% of areas (most deprived quintile) in C&P CCG for all ages and under 75s have the highest age standardised rates of hospital admission episodes for respiratory diseases. These rates, 1,970.5 and 1,449.6 per 100,000 respectively, are statistically significantly worse than the C&P CCG average. Rates in the second most deprived quintiles for all ages and under 75s are also statistically significantly worse than the C&P CCG average.

- In contrast, the least deprived two quintiles in C&P CCG for all ages and under 75s have age standardised rates of hospital admission episodes for respiratory diseases that are statistically significantly better (lower) than the C&P CCG average.

### Hospital admission episodes for COPD – all admissions, Cambridgeshire and Peterborough CCG, 2017/18

Area	All ages				Under 75s			
	Episodes	DASR per 100,000	CI Lower	CI Upper	Episodes	DASR per 100,000	CI Lower	CI Upper
Borderline	227	255.6	223.3	291.3	122	145.2	120.5	173.4
Borderline Central	107	321.8	263.2	389.4	43	130.2	94.0	175.6
City	96	301.2	243.3	368.7	54	170.8	127.8	223.5
City North	126	309.1	257.0	368.5	79	205.3	162.3	256.2
City South	78	237.8	187.6	297.3	49	162.3	119.8	215.0
East	53	119.2	89.1	156.0	30	72.2	48.7	103.1
Fenland	183	352.0	302.7	407.0	97	204.5	165.8	249.6
Huntingdon Central	143	270.7	228.0	319.0	76	151.0	118.9	189.1
Isle of Ely	157	208.9	177.4	244.3	92	131.8	106.2	161.6
North Villages	103	216.6	176.5	263.1	56	124.3	93.8	161.4
Peterborough City 1	185	407.1	348.6	472.3	114	230.1	188.8	277.5
Peterborough City 2	92	262.7	211.1	323.0	33	118.6	81.6	166.6
South Villages	86	165.1	131.8	204.1	42	83.2	59.9	112.5
St Ives	96	182.1	147.3	222.5	52	100.7	75.2	132.0
St Neots	149	274.7	232.1	322.8	74	136.6	107.2	171.5
Wisbech	189	379.9	327.5	438.3	115	252.5	208.4	303.2
C&P CCG	2,070	261.3	250.2	272.9	1,128	149.9	141.2	158.9

Note: COPD definition includes ICD10 codes J40-J44. DASR – Directly age standardised rate

	Statistically significantly better than the C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than the C&P CCG average

Source: HES

#### Key points:

- In 2017/18 there were just over 2,000 hospital admission episodes for COPD (all ages) across C&P CCG, this equates to an age standardised rate of 261.3 per 100,000 population.
- In 2017/18 there were just over 1,100 hospital admission episodes for COPD (under 75s) across C&P CCG, this is an age standardised rate of 149.9 per 100,000 population.
- The rate of hospital admissions varies across the neighbourhood team areas.
- Fenland, Peterborough City 1, and Wisbech have levels of hospital admission episodes for COPD which are statistically significantly higher (worse) than the C&P CCG average for all ages and under 75s.
- City North has levels of hospital admission episodes for COPD which are statistically significantly higher (worse) than the C&P CCG average for under 75s.

## Hospital admission episodes for COPD – elective admissions, Cambridgeshire and Peterborough CCG, 2017/18

Area	All ages				Under 75s			
	Episodes	DASR per 100,000	CI Lower	CI Upper	Episodes	DASR per 100,000	CI Lower	CI Upper
Borderline	13	14.8	7.8	25.4	-	6.9	2.5	15.0
Borderline Central	-	5.6	0.6	20.3	-	6.2	0.7	22.3
City	12	34.8	17.6	61.4	9	26.0	11.6	49.8
City North	-	13.1	4.5	28.9	-	8.7	2.1	22.6
City South	7	19.2	7.3	40.3	-	17.1	5.8	38.1
East	8	19.0	8.2	37.5	-	9.7	2.6	24.8
Fenland	20	38.8	23.6	59.9	15	31.9	17.8	52.6
Huntingdon Central	12	22.2	11.4	38.9	8	15.7	6.8	31.0
Isle of Ely	29	38.5	25.8	55.4	23	33.2	21.0	49.8
North Villages	17	37.6	21.8	60.3	9	20.0	9.1	38.0
Peterborough City 1	-	14.1	4.9	31.2	-	9.0	2.3	23.3
Peterborough City 2	-	5.8	0.6	21.1	-	3.5	0.0	19.7
South Villages	8	14.7	6.3	29.0	7	13.7	5.5	28.3
St Ives	13	23.2	12.3	39.8	11	20.9	10.4	37.4
St Neots	22	40.8	25.5	61.9	11	20.7	10.3	37.1
Wisbech	10	19.8	9.5	36.5	8	17.8	7.6	35.1
C&P CCG	187	23.4	20.2	27.0	128	16.7	14.0	19.9

Note: COPD definition includes ICD10 codes J40-J44. DASR – Directly age standardised rate

	Statistically significantly better than the C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than the C&P CCG average

Source: HES

### Key points:

- In 2017/18 there were 187 elective hospital admission episodes for COPD (all ages) across C&P CCG, this equates to an age standardised rate of 23.4 per 100,000 population.
- In 2017/18 there were 128 elective hospital admission episodes for COPD (under 75s) across C&P CCG, this is an age standardised rate of 16.7 per 100,000 population.
- Small numbers of elective hospital admissions for COPD mean that the rates generally do not vary significantly from the C&P CCG average at a neighbourhood team area level for all ages and under 75s, except for Isle of Ely where the levels are statistically significantly higher (worse) than the C&P CCG average for under 75s.

## Hospital admission episodes for COPD – emergency admissions, Cambridgeshire and Peterborough CCG, 2017/18

Area	All ages				Under 75s			
	Episodes	DASR per 100,000	CI Lower	CI Upper	Episodes	DASR per 100,000	CI Lower	CI Upper
Borderline	211	237.7	206.6	272.2	113	134.9	111.1	162.2
Borderline Central	105	316.2	258.1	383.3	41	124.0	88.8	168.5
City	83	263.3	209.2	327.0	45	144.8	105.2	194.2
City North	118	291.4	240.8	349.4	75	196.7	154.5	246.7
City South	71	218.7	170.5	276.1	43	145.2	104.9	195.7
East	45	100.1	72.9	134.1	26	62.5	40.8	91.6
Fenland	158	303.1	257.5	354.3	80	168.3	133.4	209.6
Huntingdon Central	128	243.0	202.6	289.0	66	131.6	101.7	167.5
Isle of Ely	121	161.1	133.6	192.6	62	88.4	67.8	113.4
North Villages	84	175.3	139.6	217.4	46	102.1	74.7	136.2
Peterborough City 1	179	393.0	335.6	457.0	110	221.1	180.7	267.6
Peterborough City 2	90	256.9	205.9	316.6	32	115.1	78.7	162.5
South Villages	78	150.4	118.7	187.9	35	69.5	48.3	96.7
St Ives	83	158.8	126.4	197.0	41	79.8	57.2	108.3
St Neots	126	231.9	192.9	276.3	63	115.9	89.0	148.3
Wisbech	177	355.8	305.2	412.5	105	230.0	188.1	278.5
C&P CCG	1,857	234.8	224.2	245.7	983	131.0	122.9	139.4

Note: COPD definition includes ICD10 codes J40-J44. DASR – Directly age standardised rate

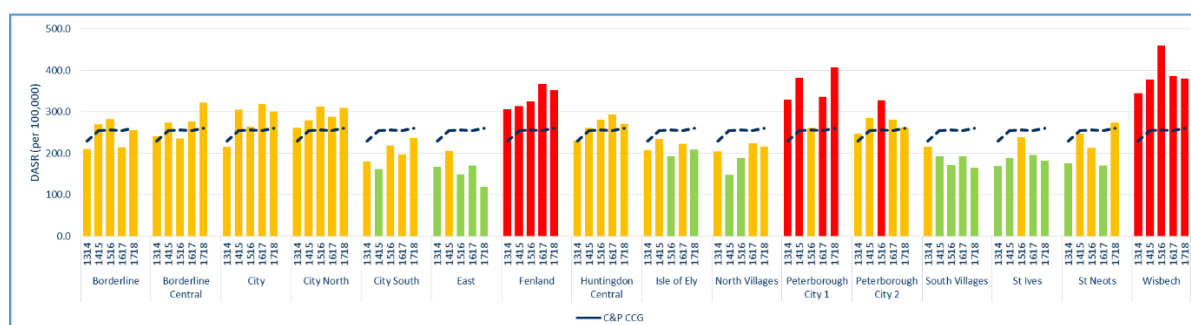
	Statistically significantly better than the C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than the C&P CCG average

Source: HES

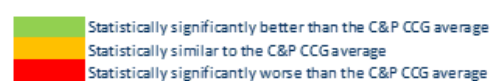
### Key points:

- In 2017/18 there were just over 1,850 emergency hospital admission episodes for COPD (all ages) across C&P CCG, this equates to an age standardised rate of 224.8 per 100,000 population.
- In 2017/18 there were just over 980 emergency hospital admission episodes for COPD (under 75s) across C&P CCG, this is an age standardised rate of 131.0 per 100,000 population.
- The rate of hospital admissions varies across the neighbourhood team areas.
- Peterborough City 1 and Wisbech have levels of emergency hospital admission episodes for COPD which are statistically significantly higher (worse) than the C&P CCG average for all ages and under 75s.
- Borderline has levels of emergency hospital admission episodes for COPD which are statistically significantly higher (worse) than the C&P CCG average for all ages.
- City North has levels of emergency hospital admission episodes for COPD which are statistically significantly higher (worse) than the C&P CCG average for under 75s.

## Hospital admission episodes for COPD – all admissions, Cambridgeshire and Peterborough CCG, 2013/14 - 2017/18



Note: COPD definition includes ICD10 codes J40-J44. DASH – Directly age standardised rate



Source: HES

### Key points:

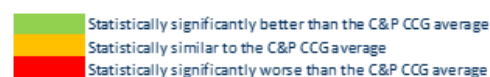
- The rate of hospital admissions varies across the neighbourhood team areas.
- Fenland, Peterborough City 2, and Wisbech have levels of hospital admission episodes for COPD (all ages) that are statistically significantly higher than the C&P CCG average in 2017/18. Overall, these neighbourhood team areas appear to have consistently higher levels over recent years.

## Hospital admission episodes for COPD by deprivation quintile – all admissions, Cambridgeshire and Peterborough CCG, 2017/18

Deprivation quintile	All ages				Under 75s			
	Episodes	DASH per 100,000	CI Lower	CI Upper	Episodes	DASH per 100,000	CI Lower	CI Upper
1 - Most deprived	730	359.4	333.6	386.6	403	210.0	190.0	231.6
2	437	303.0	275.1	332.9	253	187.3	164.9	211.9
3	380	259.3	233.8	286.9	177	121.5	104.2	140.8
4	246	203.7	179.0	230.9	146	129.0	108.9	151.7
5 - Least deprived	277	156.8	138.8	176.4	149	89.3	75.5	104.8
C&P CCG	2,070	261.3	250.2	272.9	1,128	149.9	141.2	158.9

Notes: COPD definition includes ICD10 codes J40-J44. DASH – Directly age standardised rate.

Quintile – where the population is divided into five equal groups, with the most deprived 20% (fifth) appearing in the ‘most deprived’ quintile and so on.



Source: HES

### Key points:

- The least deprived 20% of areas (most deprived quintile) in C&P CCG for all ages and under 75s have the lowest age standardised rates of hospital admission episodes for COPD in the area. These rates, 156.8 and 89.3 per 100,000 respectively, are statistically significantly below the C&P CCG average.

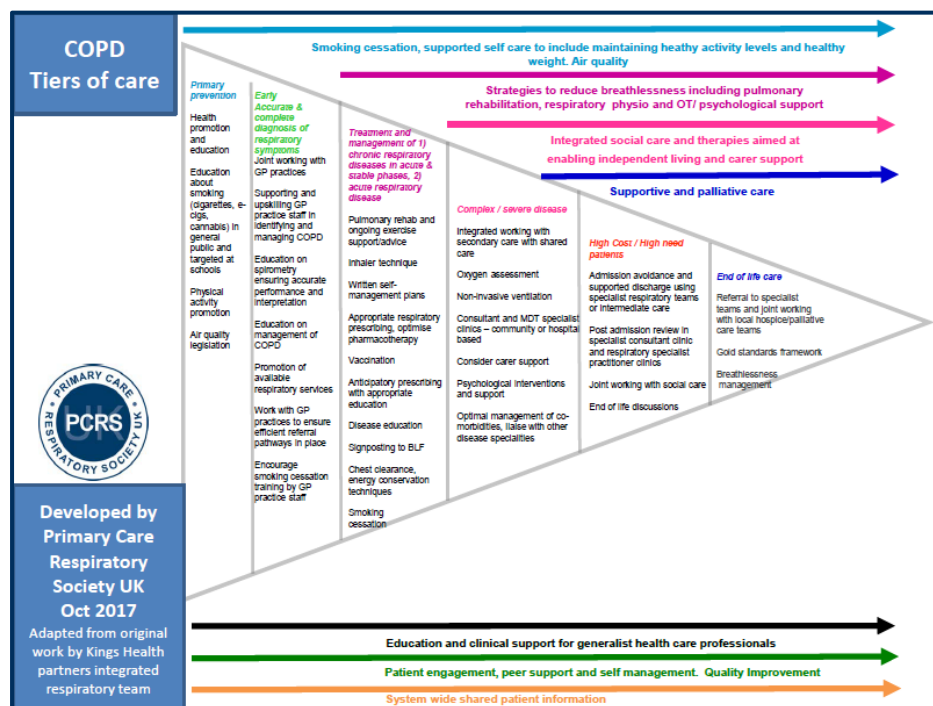
- The most deprived two quintiles in C&P CCG for all ages and under 75s have age standardised rates of hospital admission episodes for COPD that are statistically significantly higher than the C&P CCG average.

## RightCare Pathway: COPD

NHS RightCare provide national recommendations and resources for management of COPD. It is recommended that commissioners ensure early detection and accurate diagnosis of COPD, and that opportunities for long-term management are optimised to reduce exacerbations, hospital admission, and any premature mortality. Management is required to be system wide for most effectiveness and efficiency.<sup>34</sup>

The Tiers of Care model highlights the care pathway for COPD. Additional information and guidelines for the individual steps of the pathway can be found on the NHS website<sup>35</sup>.

### Tiers of Care for the treatment of COPD



Source: NHS RightCare Pathway: COPD

<sup>34</sup> RightCare Pathway: COPD [online] Available at: <https://www.england.nhs.uk/rightcare/wp-content/uploads/sites/40/2017/12/nhs-rightcare-copd-pathway-v18.pdf>

<sup>35</sup>



The COPD and asthma pathways in the Respiratory Commissioning for Value pack identifies indicators and where the performance of the C&P CCG varies from the average of its most similar 10 CCGs.

The 10 most similar CCGs demographically to C&P CCG according to NHS Rightcare are;

- |                           |                                |
|---------------------------|--------------------------------|
| ● Oxfordshire             | ● East and North Hertfordshire |
| ● Nene                    | ● Herts Valleys                |
| ● North, East, West Devon | ● Dorset                       |
| ● Gloucestershire         | ● Somerset                     |
| ● Southern Derbyshire     | ● West Hampshire               |

For C&P CCG, the COPD pathway indicators where the C&P CCG has 'worse' values than the 10 peer CCGs are:

- % of COPD patients with a record of FEV1 (statistically significant)
- Non-elective spend (statistically significant)
- <75 mortality from bronchitis, emphysema and COPD (not statistically significant)

For C&P CCG, the asthma pathway indicator where the C&P CCG has a 'worse' value than the 10 CCG peers is:

- Mortality from asthma all years.

These, along with other indicators, may be areas to explore possible opportunities for improvement.

The NHS Rightcare Commissioning for value Respiratory report details indicators of interest relating to spend, admissions, and procedures for the C&P CCG compared to the collective average of the best 5 peer CCGs. Highlights include (but are not limited to);

- Respiratory spend in C&P CCG is statistically significantly higher per 1,000 (age-sex weighted) population compared to the best 5.
- Respiratory day case admissions per 100,000 age-sex weighted population are statistically significantly higher in C&P CCG compared to the best 5.
- The number of emergency admissions for asthma per 100,000 age-sex weighted children are statistically significantly higher in C&P CCG compared to the best 5.
- The number of day case admissions for 'chronic upper respiratory', 'chronic lower respiratory', and 'influenza and pneumonia' per 100,000 age-sex weighted population are statistically significantly higher in C&P CCG compared to the best 5.
- The number of emergency admissions by children and by adults for acute lower respiratory per 100,000 age-sex weighted population is statistically significantly higher in C&P CCG compared to the best 5.
- The average elective length of stay (not including day cases) for chronic lower respiratory is statistically significantly higher in C&P CCG compared to the best 5.
- The average emergency length of stay for 'influenza and pneumonia', 'lung diseases due to external agents', and 'other diseases of the respiratory system' are statistically significantly higher in C&P CCG compared to the best 5.
- Respiratory primary care prescribing spend is higher in C&P CCG compared to the best 5 for several treatments.

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<sup>36</sup> NHS Rightcare Commissioning for Value Focus Pack; Respiratory April 2016, PHE, NHS England (online) Available from: <https://www.england.nhs.uk/rightcare/products/ccg-data-packs/focus-packs/focus-packs-for-cvd-neurological-respiratory-maternity-april-2016/>

- The cost of several individual procedures relating to asthma and obstructive airways disease per 100,000 age-sex weighted population are statistically significantly higher in C&P CCG compared to the best 5.

### Additional data sources

#### **Respiratory Focus Pack Tool, Public Health England (2016)**

Public Health England's Respiratory Focus Pack Tool, available online, contains a wealth of information of respiratory related indicators, many of which are covered in other areas of this report. Indicators are presented in an interactive mapping tool.<sup>37</sup>

#### **National Institute for Clinical Excellence (NICE) guidelines for COPD (Dec 2018)**

The **Chronic obstructive pulmonary disease in over 16s: diagnosis and management** guideline covers diagnosing and managing COPD, which includes emphysema and chronic bronchitis. It aims to help people with COPD to receive a diagnosis earlier so that they can benefit from treatments to reduce symptoms, improve quality of life and keep them healthy for longer.<sup>38</sup>

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<sup>37</sup> Respiratory Focus Pack Tool, Public Health England (online) Available at:  
<http://tools.england.nhs.uk/cfv2016/respiratory/atlas.html>

<sup>38</sup> Chronic obstructive pulmonary disease in over 16s: diagnosis and management (online) Available at:  
<https://www.nice.org.uk/guidance/NG115>

## Mortality

Respiratory disease is one of the main causes of death for Cambridgeshire and Peterborough residents, accounting for 2,825 deaths in 2015-17 (13% of all C&P CCG deaths).<sup>39</sup>

Data indicates that deaths where asthma is identified as the underlying cause are small in numbers, therefore asthma has not been included in this section.<sup>40</sup>

### Deaths from Respiratory Disease

#### Number of deaths with Respiratory disease as the primary cause of death, all ages, by AEP Neighbourhood Team, C&P CCG

Neighbourhood team	Respiratory disease as underlying cause of death (number) - all ages					2015-17 DASR per 100,000		
	2011-13	2012-14	2013-15	2014-16	2015-17	DASR	CI LL	CI UL
Borderline	361	364	370	371	380	145.4	131.1	160.9
Borderline Central	108	113	114	115	135	140.0	117.1	166.1
City	60	61	60	58	82	83.6	66.4	104.0
City North	181	172	147	131	142	98.9	83.1	116.8
City South	123	118	103	93	91	85.1	68.4	104.7
East	82	87	94	102	103	76.2	62.2	92.5
Fenland	176	188	207	213	217	141.3	123.0	161.4
Huntingdon Central	242	232	241	225	246	161.4	141.9	183.0
Isle of Ely	173	161	168	165	188	89.1	76.8	102.9
North Villages	151	152	170	178	179	115.4	99.0	133.8
Peterborough City 1	181	166	162	163	170	146.2	124.6	170.5
Peterborough City 2	164	185	179	169	163	148.0	125.9	172.8
South Villages	106	101	121	128	138	94.2	79.1	111.4
St Ives	126	140	159	166	173	119.0	101.9	138.2
St Neots	169	174	174	164	178	122.8	105.3	142.4
Wisbech	196	198	195	216	240	164.2	144.0	186.5
C&P CCG	2,600	2,611	2,665	2,657	2,825	122.0	117.5	126.6

Note: Respiratory definition includes ICD10 codes J00-J99. DASR = Directly Age Standardised Rate. CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance.

	Statistically significantly better than C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than C&P CCG average

Source: PCMD.

#### Key points:

- In the period 2015-17 2,825 deaths were recorded with respiratory disease as the underlying cause for all ages in C&P CCG, an increase of 168 compared to the period 2014-16.
- The neighbourhood teams with the highest number of respiratory disease related deaths in 2015-17 are Borderline (380) and Huntingdon Central (246).
- The neighbourhood teams with rates of respiratory disease related deaths statistically significantly higher than the C&P CCG average in 2015-17 are Borderline, Huntingdon Central and Wisbech.

<sup>39</sup> Cambridgeshire County Council Public Health Intelligence (NHS Digital Primary Care Mortality Database, ONS mid-year population estimates).

<sup>40</sup> PCMD

## Number of deaths with Respiratory disease as the primary cause of death, under 75 years, by AEP Neighbourhood Team, C&P CCG

Neighbourhood team	Respiratory disease as underlying cause of death (number) - under 75s					2015-17 DASR per 100,000		
	2011-13	2012-14	2013-15	2014-16	2015-17	DASR	CI LL	CI UL
Borderline	69	67	61	75	77	32.3	25.5	40.4
Borderline Central	20	26	31	34	42	42.1	30.1	57.0
City	9	11	10	9	16	17.7	10.0	28.9
City North	26	26	25	25	22	19.0	11.8	28.8
City South	12	10	8	12	16	18.7	10.7	30.5
East	21	19	25	26	29	23.8	15.9	34.2
Fenland	36	39	41	51	56	40.0	30.2	52.0
Huntingdon Central	54	48	44	43	53	35.8	26.8	46.8
Isle of Ely	21	29	40	44	47	23.7	17.4	31.5
North Villages	20	13	20	22	30	23.3	15.7	33.2
Peterborough City 1	59	46	52	48	51	36.0	26.4	47.8
Peterborough City 2	28	32	34	35	29	34.8	23.3	50.0
South Villages	15	11	14	18	22	15.1	9.4	22.9
St Ives	32	29	30	29	32	21.2	14.5	30.0
St Neots	39	39	34	32	35	22.4	15.6	31.2
Wisbech	49	44	45	53	65	48.6	37.5	61.9
C&P CCG	510	489	514	556	622	28.6	26.4	31.0

Note: Respiratory definition includes ICD10 codes J00-J99. DASR = Directly Age Standardised Rate. CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance.

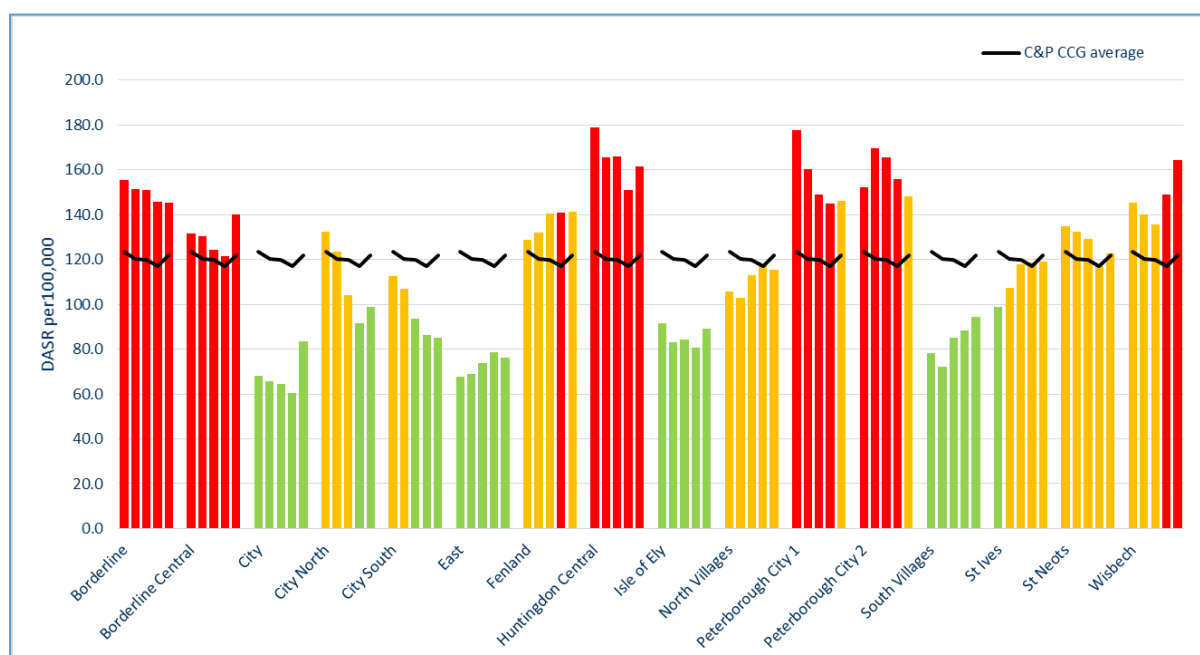
	Statistically significantly better than C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than C&P CCG average

Source: PCMD.

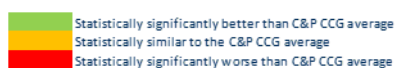
### Key points:

- In the period 2015-17 622 deaths were recorded with respiratory disease as the underlying cause for under 75 year olds in C&P CCG, an increase of 66 compared to the period 2014-16.
- The neighbourhood teams with the highest number of respiratory disease related deaths in under 75 year olds in 2015-17 are Borderline (77) and Wisbech (65).
- The only neighbourhood team with a rate of respiratory disease related deaths in under 75 year olds that is statistically significantly higher than the C&P CCG average in 2015-17 is Wisbech.

## Rate of deaths where Respiratory Disease is the underlying cause of death, all ages, by neighbourhood team, 2011-2013 to 2015-17 (DASR per 100,000)



Note: Respiratory definition includes ICD10 codes J00-J99. DASR = Directly Age Standardised Rate.

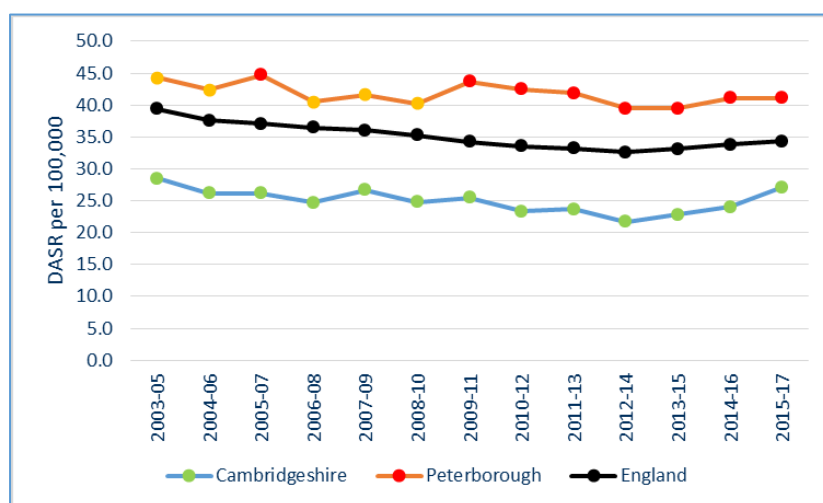


Source: PCMD.

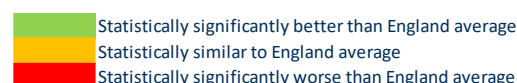
### Key points:

- The rate of deaths recorded with respiratory disease as the underlying cause for all ages in C&P CCG varies between neighbourhood team.
- Borderline, Borderline Central, Huntingdon Central, Peterborough City 1 and Peterborough City 2 have predominantly had rates that are statistically significantly higher than the C&P CCG average since 2011-13.
- Wisbech has seen an increase in the rate of respiratory related deaths to levels that are statistically significantly worse than C&P CCG average.

## Under 75 mortality rate from respiratory disease (persons), 2003-2005 to 2015-17 (DASR per 100,000)



Note: Respiratory definition includes ICD10 codes J00-J99. DASR = Directly Age Standardised Rate. Data not available for C&P CCG level.



**Source:** PHOF indicator 4.07i, Public Health England (based on ONS source data)

### Key points:

- The rate of deaths recorded with respiratory disease as the underlying cause for under 75 year olds in C&P CCG varies between Cambridgeshire and Peterborough.
- Rates in Cambridgeshire have been statistically significantly better than the England average since 2003-05.
- Rates in Peterborough have been statistically significantly worse than the England average since 2009-11.

Additional analysis (data not shown)<sup>41</sup>:

- **District level data:** Analysis of PHOF indicator 4.07i at a district level also identifies that for 2015-17 the rate of deaths recorded with respiratory disease as the underlying cause for under 75 year olds in Fenland is statistically significantly worse than the England average (42.9 per 100,000 compared to 34.3 per 100,000) (all other Cambridgeshire districts are statistically significantly better for this period).
- **Males:** Analysis of PHOF indicator 4.07i at a district level by sex also identifies that for 2015-17 the rate of deaths recorded with respiratory disease as the underlying cause for males aged under 75 year old in Fenland is statistically significantly worse than the England average (52.4 per 100,000 compared to 39.9 per 100,000) (all other Cambridgeshire districts, and Peterborough, are statistically significantly better for males for this period).
- **Females:** Analysis of PHOF indicator 4.07i at a district level by sex also identifies that for 2015-17 the rate of deaths recorded with respiratory disease as the underlying cause for females aged under 75 year old are statistically similar to the England average for all Cambridgeshire districts and Peterborough except South Cambridgeshire, which is assessed as statistically significantly better for females for this period).

<sup>41</sup> PHOF indicator 4.07i available at <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework>

## Deaths from COPD

Number of deaths with COPD as the primary cause of death, all ages, by AEP Neighbourhood Team, C&P CCG

Neighbourhood team	COPD as underlying cause of death (number) - all ages					2015-17 DASR per 100,000		
	2011-13	2012-14	2013-15	2014-16	2015-17	DASR	CI LL	CI UL
Borderline	113	128	129	135	132	50.2	42.0	59.6
Borderline Central	44	43	45	44	57	58.7	44.3	76.2
City	19	19	22	23	36	37.8	26.4	52.4
City North	60	56	47	45	50	35.6	26.3	47.1
City South	42	37	29	25	30	29.4	19.7	42.1
East	27	29	32	42	38	28.8	20.4	39.6
Fenland	60	70	81	95	95	61.0	49.3	74.6
Huntingdon Central	89	91	96	88	101	65.5	53.3	79.6
Isle of Ely	62	62	68	71	74	34.6	27.1	43.5
North Villages	47	44	53	53	54	36.5	27.3	47.7
Peterborough City 1	65	61	62	68	73	63.8	49.8	80.4
Peterborough City 2	53	63	63	61	59	53.0	40.2	68.6
South Villages	41	33	43	50	56	37.9	28.6	49.3
St Ives	49	51	49	51	52	34.5	25.7	45.3
St Neots	70	65	55	61	78	51.9	41.0	64.9
Wisbech	81	88	87	94	102	68.6	55.9	83.3
C&P CCG	922	940	961	1,006	1,087	46.7	44.0	49.6

Note: COPD definition includes ICD10 codes J40-J44. DASR = Directly Age Standardised Rate. CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance.

	Statistically significantly better than C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than C&P CCG average

Source: PCMD.

Key points:

- In the period 2015-17 1,087 deaths were recorded with COPD as the underlying cause for all ages in C&P CCG, an increase of 81 compared to the period 2014-16.
- The number of deaths from this cause has increased yearly in C&P CCG since 2009-11.
- The neighbourhood teams with the highest number of COPD related deaths are Borderline (132), Wisbech (102) and Huntingdon Central (101).
- The neighbourhood teams with rates of COPD related deaths statistically significantly higher than the C&P CCG average in 2015-17 are Huntingdon Central, Peterborough City 1, and Wisbech.

**Number of deaths with COPD as the primary cause of death, under 75 years, by AEP  
Neighbourhood Team, C&P CCG**

Neighbourhood team	COPD as underlying cause of death (number) - under 75s					2015-17 DASR per 100,000		
	2011-13	2012-14	2013-15	2014-16	2015-17	DASR	CI LL	CI UL
Borderline	36	38	35	39	41	17.4	12.5	23.7
Borderline Central	13	15	15	15	19	19.1	11.4	29.8
City	6	7	5	4	9	10.6	4.8	20.2
City North	14	16	13	12	10	8.7	4.1	16.1
City South	7	7	4	7	10	12.0	5.8	22.1
East	10	9	16	19	20	16.4	10.0	25.3
Fenland	15	16	23	35	38	27.0	19.1	37.1
Huntingdon Central	30	24	23	22	29	19.6	13.1	28.1
Isle of Ely	12	14	19	22	25	12.6	8.1	18.6
North Villages	7	3	7	10	15	11.8	6.6	19.4
Peterborough City 1	24	22	25	23	21	16.9	10.3	26.0
Peterborough City 2	14	18	19	18	16	19.1	10.9	31.0
South Villages	10	5	5	11	12	8.4	4.3	14.6
St Ives	10	8	10	12	17	11.1	6.5	17.8
St Neots	23	21	16	18	24	15.4	9.8	22.9
Wisbech	26	29	29	39	43	31.9	23.1	43.0
C&P CCG	257	252	264	306	349	16.2	14.6	18.0

Note: COPD definition includes ICD10 codes J40-J44. DASR = Directly Age Standardised Rate. CI lower/upper – Confidence Intervals (95%) lower and upper limits to determine statistical significance.

	Statistically significantly better than C&P CCG average
	Statistically similar to the C&P CCG average
	Statistically significantly worse than C&P CCG average

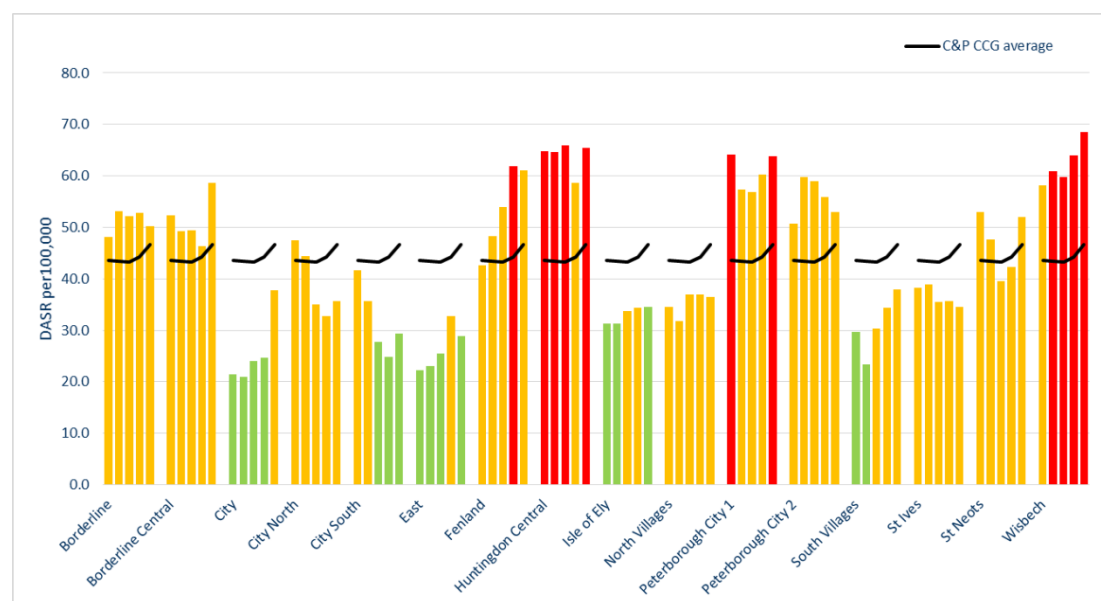
**Source:** PCMD.

**Key points:**

- In the period 2015-17, 349 deaths were recorded with COPD as the underlying cause for under 75 year olds in C&P CCG, an increase of 43 compared to the period 2014-16.
- The neighbourhood teams with the highest number of COPD related deaths in under 75 year olds in 2015-17 are Wisbech (43), Borderline (41), and Fenland (38).
- The neighbourhood teams with rates of COPD related deaths in under 75 year olds that are statistically significantly higher than the C&P CCG average in 2015-17 are Fenland and Wisbech.



**Rate of deaths where COPD is the underlying cause of death, (DASR per 100,000), all age, 2011-13 to 2015-17.**



Note: COPD definition includes ICD10 codes J40-J44. DASR = Directly Age Standardised Rate.

■ Statistically significantly better than C&P CCG average  
■ Statistically similar to the C&P CCG average  
■ Statistically significantly worse than C&P CCG average

Source: PCMD.

**Key points:**

- The rate of deaths recorded with COPD as the underlying cause for all ages in C&P CCG varies between neighbourhood team.
- Huntingdon Central and Wisbech have predominantly had rates that are statistically significantly higher than the C&P CCG average since 2011-13.
- Several neighbourhood teams have an upward trend. This is more notable for Fenland, Peterborough City 1 and Wisbech in recent years. Borderline Central also has a much higher rate in the last year (2015-17) compared to previous years.
- Although statistical significance hasn't changed, the rates for Borderline Central and St Neots appear to have had a spike in 2015-17. City has also seen a spike in 2015-17 and is assessed as statistically similar to C&P CCG in 2015-17.