

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

<b>TITLE:</b>	<b>PREVENTABLE SIGHT LOSS</b>
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<b>SUBTITLE:</b>	<p><b>4.12i Crude rate of sight loss due to Age-Related Macular Degeneration (AMD) in persons aged 65 years and over per 100,000 population.</b></p> <p><b>4.12ii Crude rate of sight loss due to Glaucoma in persons aged 40 years and over per 100,000 population.</b></p> <p><b>4.12iii Crude rate of sight loss due to Diabetic Eye Disease in persons aged 12 years and over per 100,000 population.</b></p> <p><b>4.12iv Crude rate of sight loss certifications per 100,000 population.</b></p>
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<b>Domain:</b>	<b>Healthcare and premature mortality</b>
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<b>Frequency of Availability:</b>	<b>Annual</b>
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<b>Time Period Of Data Analysis:</b>	<b>Comparator 2014/15 or 2015/16 Trend 2010/11 to 2015/16</b>
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## AVAILABLE COMPARISONS

TYPE	AVAILABLE
National, Regional or Peer Group	Yes
Electoral Ward	No
Neighbourhood	No
Socioeconomic Differences	No
Targets, Trends & Projections	Yes

## KEY POINTS

- For the period 2015/16, North East Lincolnshire had the second lowest crude rate of AMD sight loss, out of all the local authorities in the Yorkshire and the Humber.
- For the period 2014/15, North East Lincolnshire had the fifth highest crude rate of glaucoma sight loss, out of all the local authorities in the Yorkshire and the Humber.
- For the period 2014/15, North East Lincolnshire had the second highest crude rate of sight loss due to diabetic eye disease, out of all the local authorities in the Yorkshire and the Humber.
- For the period 2015/16, North East Lincolnshire had the third lowest crude rate of new certifications of visual impairment (CVI) out of all the local authorities in the Yorkshire and the Humber.

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## DESCRIPTION

Prevention of avoidable sight loss is recognised as a key priority for the WHO's global initiative for the elimination of avoidable blindness by 2020 (Vision 2020 – The Right To Sight), to which the UK is a signatory and which is also a key priority for Vision 2020UK and the UK Vision Strategy (Improving outcomes and supporting transparency, Part 2. Department of Health, 2016).

Sight loss is a particularly important issue in the context of an aging population such as North East Lincolnshire.

Avoidable sight loss is both a serious and modifiable public health issue. Early detection and treatment is vital for the prevention of sight loss, and assists people to maintain independent lives and reduce social care support needs which would be necessary for permanent sight loss. In addition to the loss of independence, sight loss can increase the risk of depression, falls and hip fractures, and living in poverty.

There are almost two million people in the UK living with sight loss. This figure includes those that have uncorrected refractive error or cataract that may be reversed. This figure also includes around 360,000 people registered as blind or partially sighted in the UK, who have severe and irreversible sight loss. ([RNIB](#))

The major sight conditions in the UK are as follows:

Condition	Breakdown of people with sight loss (per cent)
Age-related macular degeneration (AMD)	16.7%
Cataracts	13.7%
Diabetic retinopathy	3.5%
Glaucoma	5.3%
Uncorrected refractive error	53.3%
Other	7.4%

Source: RNIB

North East Lincolnshire is an ageing population. The number of older people is projected to increase and the percentage of the overall North East Lincolnshire population comprising older people is also projected to increase. Sight loss affects people of all ages but especially older people since 1 in 5 people aged 75 years, and 1 in 2 people aged 90 years and over, are living with sight loss. Therefore the number of people with sight loss is likely to increase in line with the population ageing.

When an individual's eye sight deteriorates below a set level, that individual is eligible to be certified as sight impaired (partially sighted) or severely sight impaired (blind). Certification takes place when a consultant ophthalmologist completes a certificate of vision impairment (CVI). It is the data from the CVI that is used to monitor progress against PHOF 4.12.

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

There are four parts to PHOF 4.12:

1. 4.12i Crude rate of sight loss due to Age Related Macular Degeneration (AMD) in persons aged 65 and over per 100,000 population
2. 4.12ii Crude rate of sight loss due to Glaucoma in persons aged 40 and over per 100,000 population
3. 4.12iii Crude rate of sight loss due to Diabetic Eye Disease in persons aged 12 and over per 100,000 population
4. 4.12iv Crude rate of sight loss certifications per 100,000 population.

The first three indicators relate to the three main eye diseases (Age related macular degeneration, glaucoma, diabetic eye disease) which can result in blindness or partial sight if not diagnosed and treated in time. The fourth indicator relates to completions of CVIs (all causes) by a consultant ophthalmologist, which initiates the process of registration with a local authority and can lead to accessing services.

Research by the RNIB suggests that 50% of cases of blindness and serious sight loss could be prevented if detected and treated in time. Prevention of sight loss will help people maintain independent lives as far as possible and reduce needs for social care support which would be necessary if sight was lost permanently.

Certification is voluntary so true rates for the indicators may be higher than the figures shown. There are geographic variations in data collection and therefore low figures may reflect non-completion of certification rather than just low incidence. Incidence may vary due to the risk of sight loss being influenced by health inequalities, including deprivation and the age profile of the local population.(Improving outcomes and supporting transparency, Department of Health, 2012).

Sources of information to inform this summary include the RNIB, NHS Digital, the PANSI and POPPI systems, the public health outcomes framework, and the DH technical specifications of public health indicators.

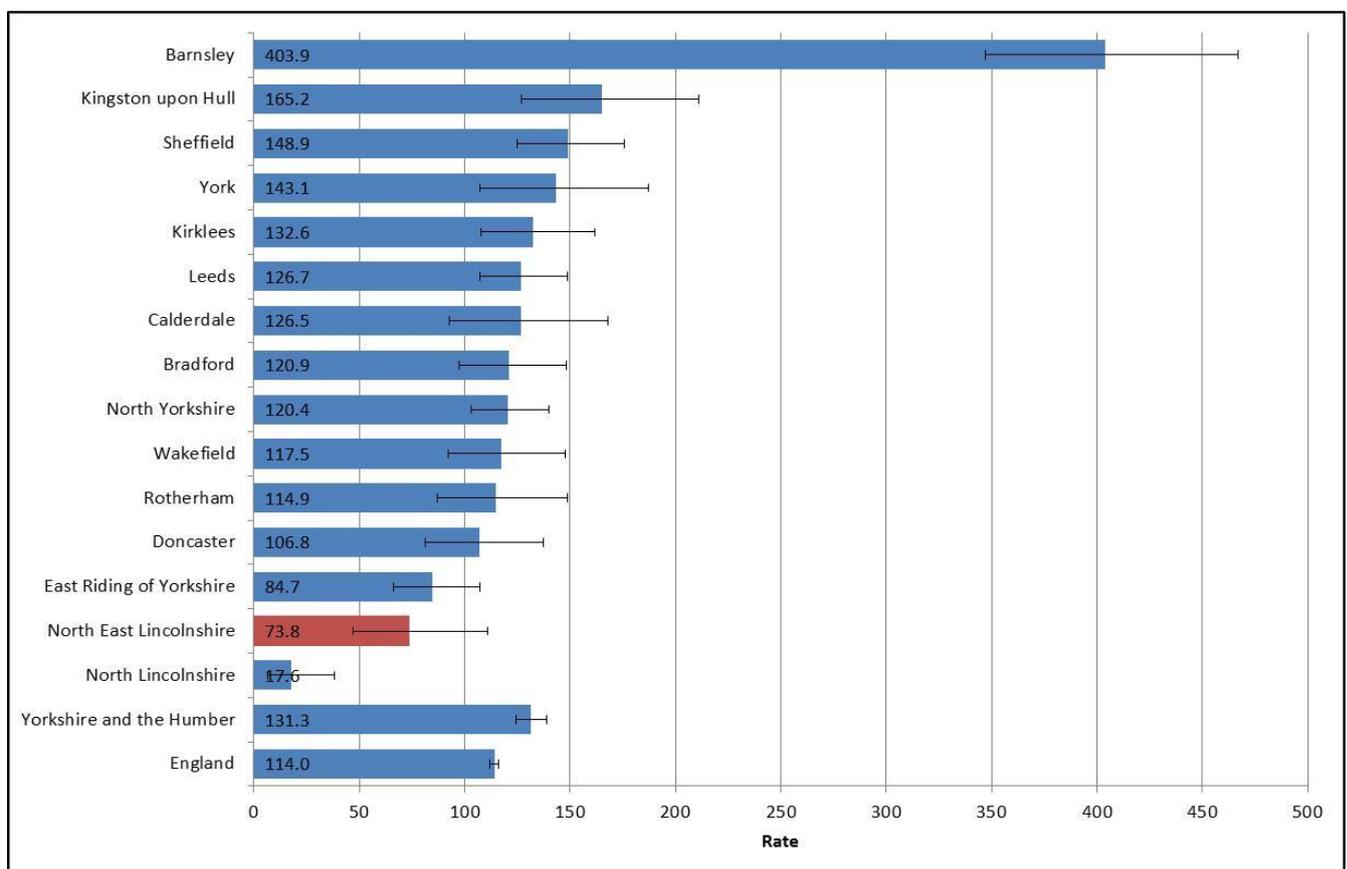
# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

## NATIONAL, REGIONAL OR PEER GROUP

**PHOF 4.12i** - This indicator relates to AMD, the most prevalent of the three main eye diseases, which can result in blindness or partial sight if not diagnosed and treated in time.

Figures presented in Figure 1 show that for 2015/16, North East Lincolnshire had the second lowest crude rate of AMD sight loss, out of all the local authorities in the Yorkshire and the Humber. The North East Lincolnshire rate of AMD sight loss per 100,000 population (73.8) was lower (significantly) than both the England (114.0) and regional (131.3) rates. This indicator is calculated from the number of new certifications of visual impairment (CVIs) due to AMD as the main cause of sight loss or if no cause main cause as a contributory factor, for people aged 65 years and over, converted to a crude rate per 100,000 population.

**Figure 1** Sight loss due to AMD in persons aged 65 years and over, for England and the local authorities in the Yorkshire and the Humber, crude rate per 100,000 population, 2015/16



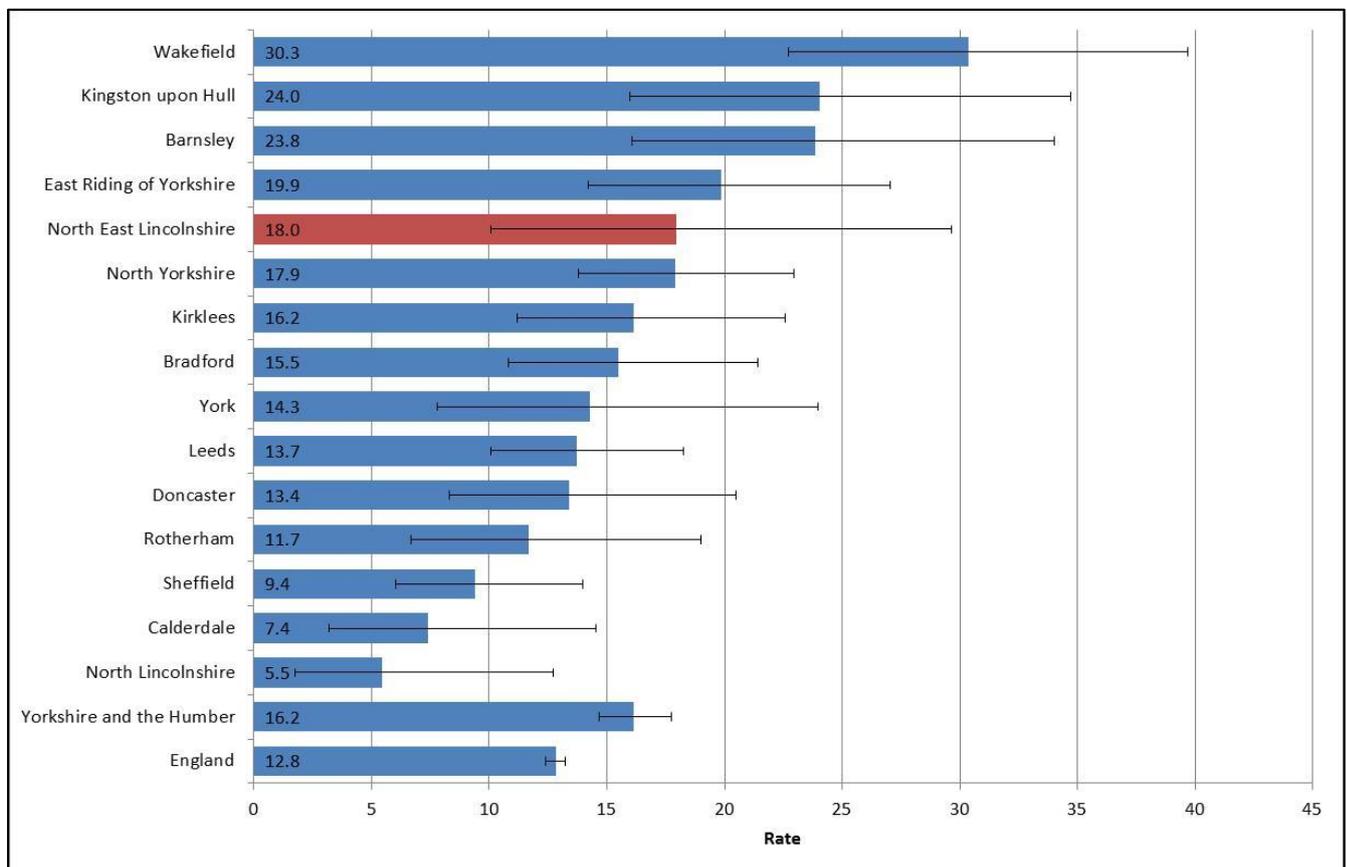
Source: Public Health England

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

**PHOF 4.12ii** - This indicator relates to glaucoma, one of the three main eye diseases, which can result in blindness or partial sight if not diagnosed and treated in time.

Figures presented in Figure 2 show that for 2014/15, North East Lincolnshire had the fifth highest crude rate of glaucoma sight loss, out of all the local authorities in the Yorkshire and the Humber. The North East Lincolnshire rate of glaucoma sight loss per 100,000 population (18.0) was higher (not significantly) than both the England (12.8) and regional (16.2) rates. This indicator is calculated from the number of new certifications of visual impairment (CVIs) due to glaucoma as the main cause of sight loss or if no cause main cause as a contributory factor, for people aged 40 years and over, converted to a crude rate per 100,000 population.

**Figure 2** Sight loss due to glaucoma in persons aged 40 years and over, for England and the local authorities in the Yorkshire and the Humber, crude rate per 100,000 population, 2014/15



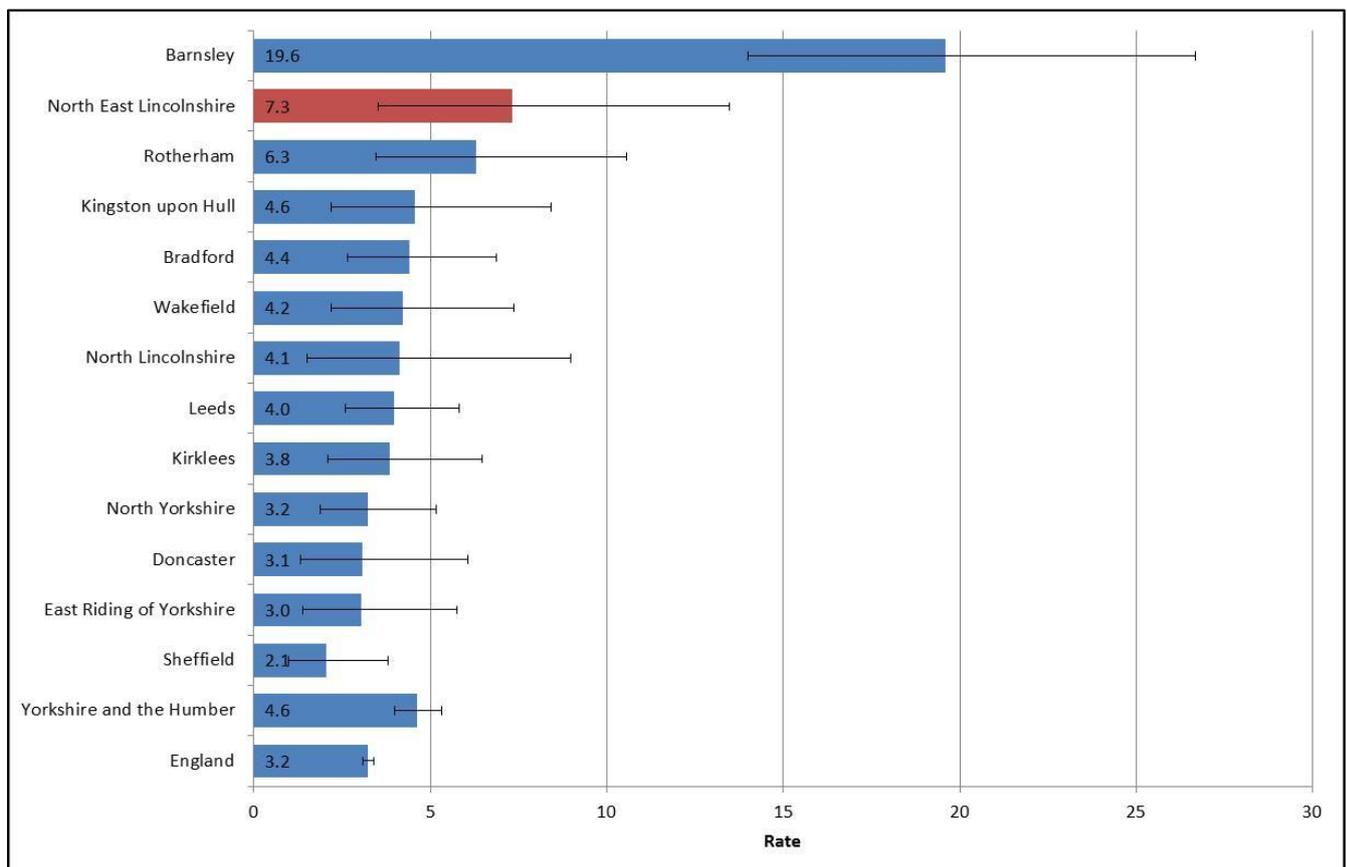
Source: Public Health England

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

**PHOF 4.12iii** - This indicator relates to Diabetic Eye Disease, one of the three main eye diseases, which can result in blindness or partial sight if not diagnosed and treated in time. Diabetic retinopathy is the leading cause of preventable sight loss in working age people in the UK and early detection through screening halves the risk of blindness.

Figures presented in Figure 3 show that for 2014/15, North East Lincolnshire had the second highest crude rate of diabetic eye disease sight loss, out of all the local authorities in the Yorkshire and the Humber. The North East Lincolnshire rate of diabetic eye disease sight loss per 100,000 population (7.3) was higher (significantly) than the England (3.2) rate and higher (not significantly) than the regional (4.6) rate. This indicator is calculated from the number of new certifications of visual impairment (CVIs) due to diabetic eye disease as the main cause of sight loss or if no cause main cause as a contributory factor, for people aged 12 years and over, converted to a crude rate per 100,000 population.

**Figure 3** Sight loss due to diabetic eye disease in persons aged 12 years and over, for England and the local authorities in the Yorkshire and the Humber, crude rate per 100,000 population, 2014/15



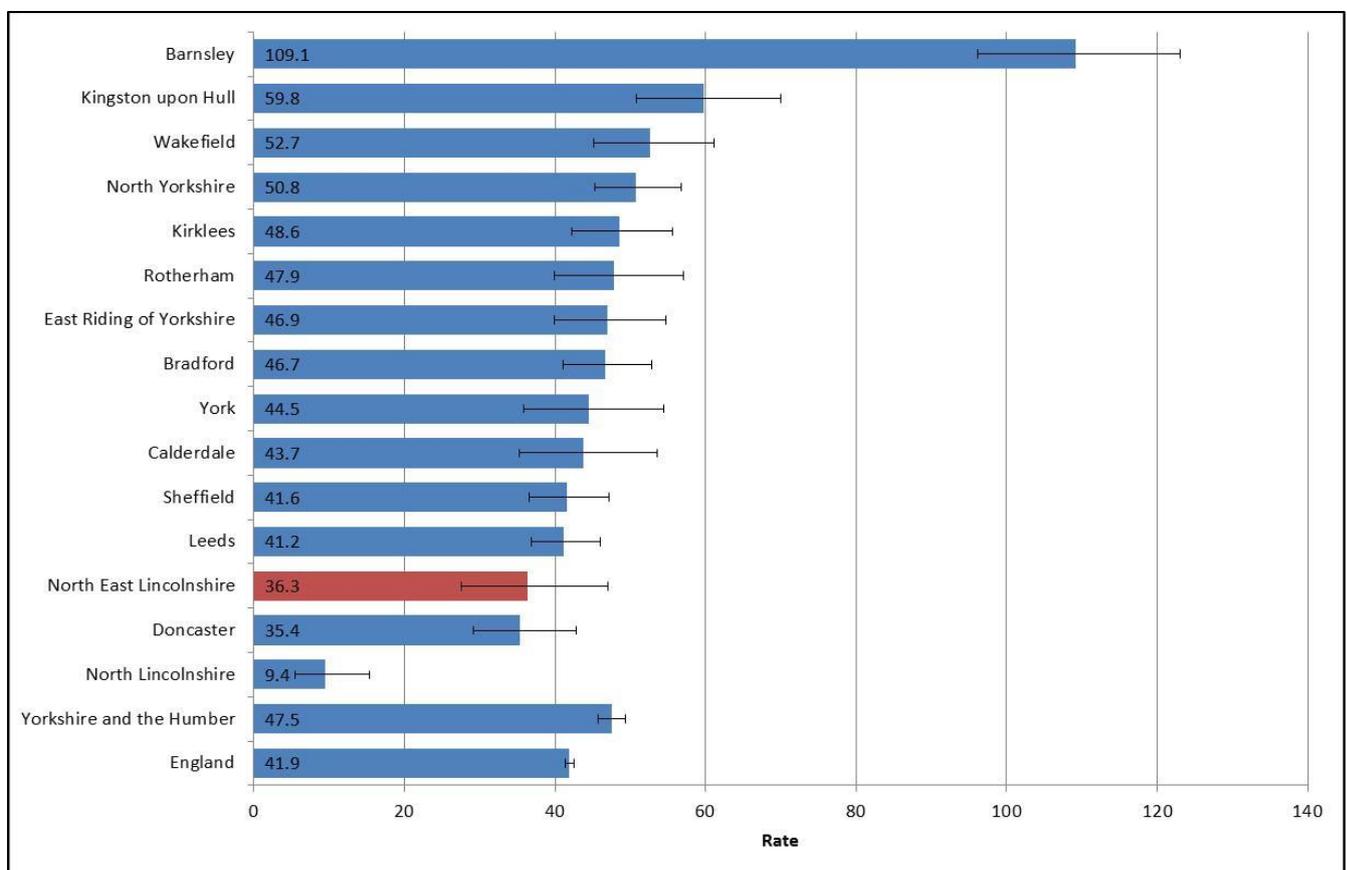
Source: Public Health England  
 \* No data for Calderdale or York LAs

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

**PHOF 4.12iv** - This indicator relates to completions of CVI (all causes both preventable and non-preventable) by a consultant ophthalmologist – this initiates the process of registration with a local authority and leads to access to services.

Figures presented in Figure 4 show that for the period 2015/16, North East Lincolnshire had the third lowest crude rate of new certifications of visual impairment (CVI) out of all the local authorities in the Yorkshire and the Humber. The North East Lincolnshire rate of new CVIs per 100,000 population (36.3) was lower (not significantly) than both the England (41.9) and the regional (47.5) rates. This indicator is calculated from the number of new CVIs (all causes – preventable and non-preventable), and converted to a crude rate per 100,000 population.

**Figure 4** Crude rate of sight loss certifications per 100,000 population (all ages) for England and the local authorities in the Yorkshire and the Humber, 2015/16



Source: Public Health England

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

## TRENDS, TARGETS & PROJECTIONS

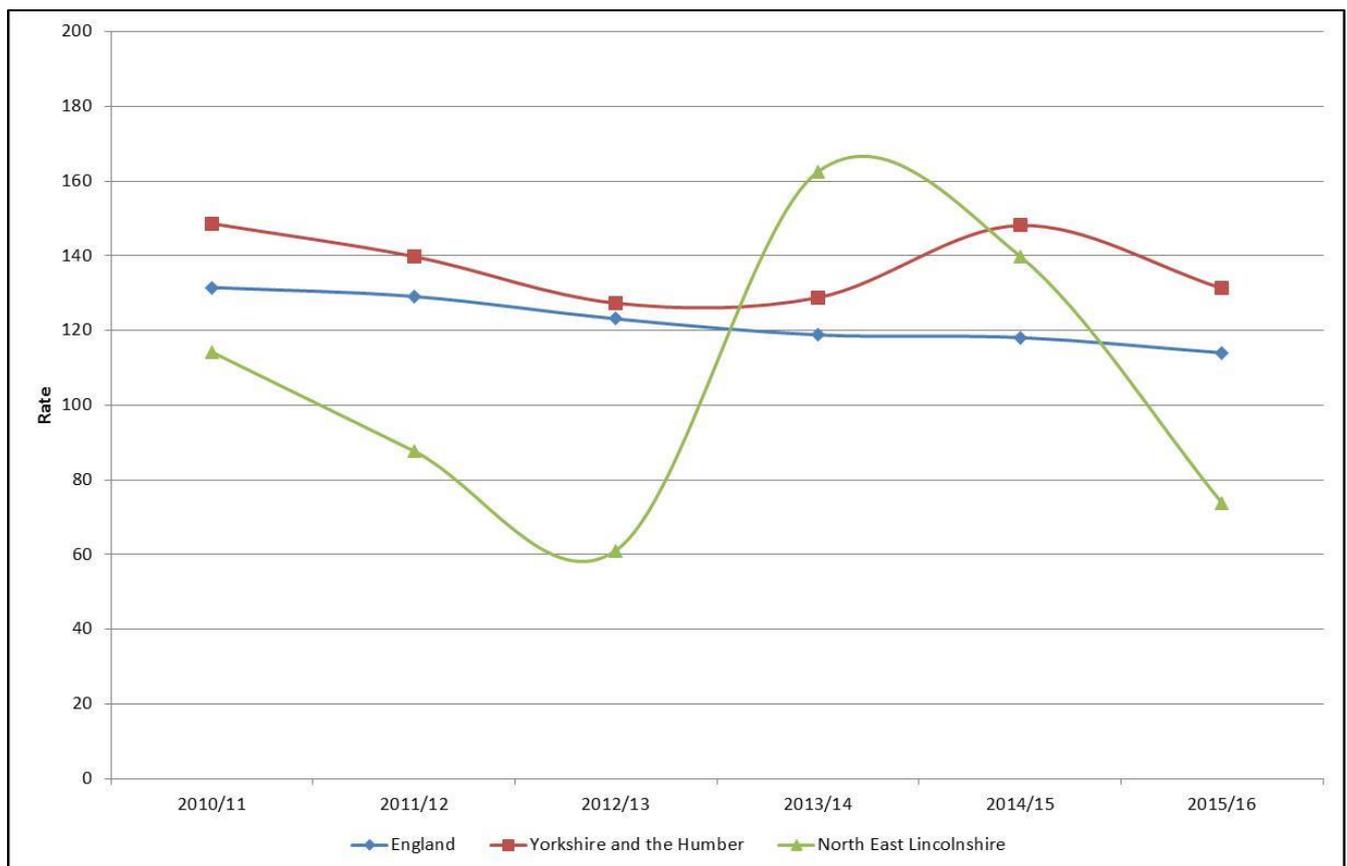
### PHOF 4.12i

Figures presented in Figure 5 show that the North East Lincolnshire rate of sight loss due to AMD in persons aged 65 years and over is now lower than both the England and regional rates, however this has fluctuated over recent years. The actual numbers of new CVIs due to AMD as the main cause of sight loss or if no main cause as a contributory factor, are shown for North East Lincolnshire in the table below.

Period	Number of NEL CVIs due to AMD
2010/11	32
2011/12	25
2012/13	18
2013/14	49
2014/15	43
2015/16	23

Source: Public Health England

**Figure 5** Trend for crude rates of sight loss due to AMD in persons aged 65 years and over per 100,000 population for England, the Yorkshire and the Humber, and North East Lincolnshire UA, 2010/11 to 2015/16



Source: Public Health England

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

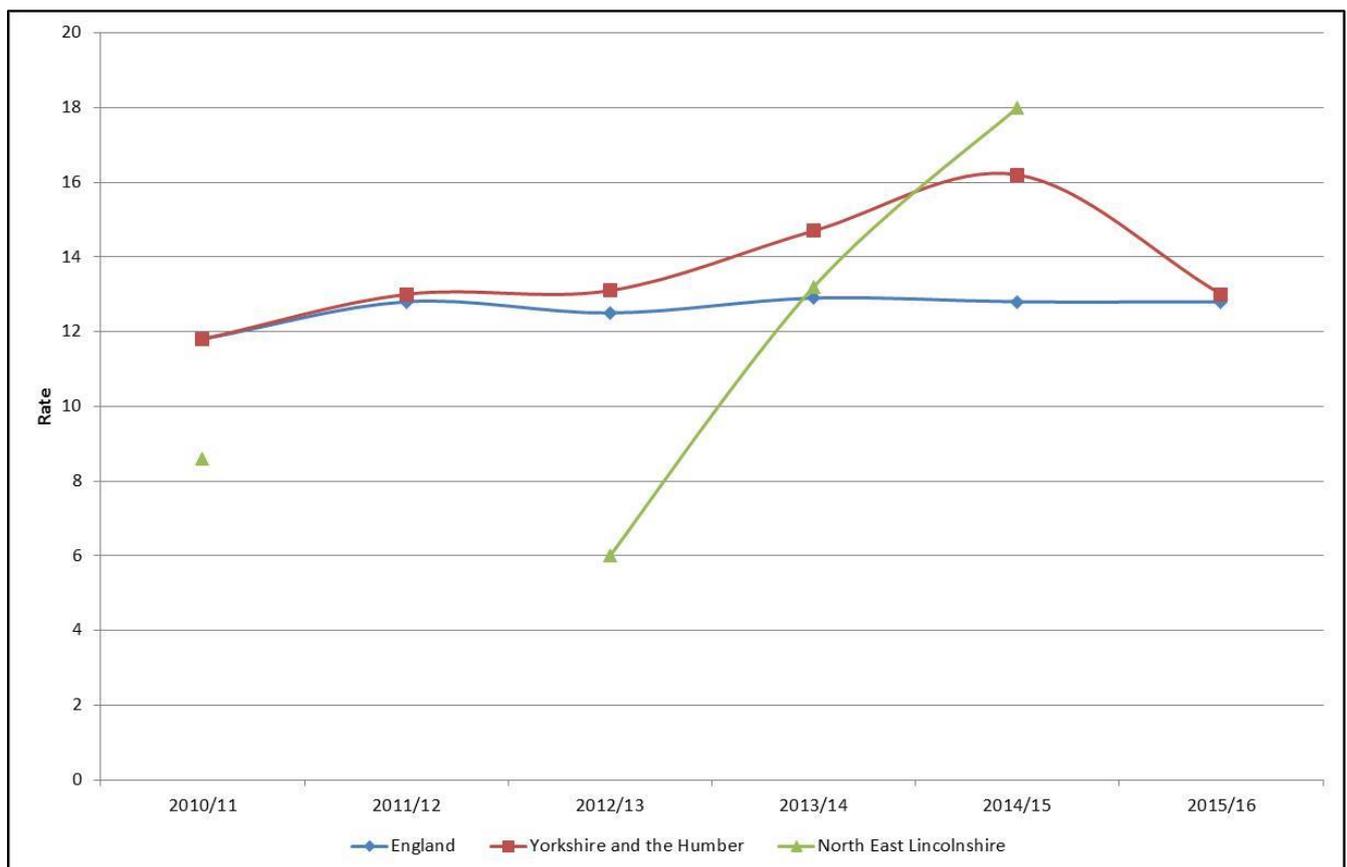
## PHOF 4.12ii

Figures presented in Figure 6 show that the North East Lincolnshire rate of sight loss due to glaucoma in persons aged 40 years has risen over recent years and is now higher than both the England and regional rates. The actual numbers of new CVIs due to glaucoma as the main cause of sight loss or if no main cause as a contributory factor, are shown for North East Lincolnshire in the table below.

Period	Number of NEL CVIs due to glaucoma
2010/11	7
2011/12	5
2012/13	*
2013/14	11
2014/15	15
2015/16	*

Source: Public Health England

**Figure 6** Trend for crude rates of sight loss due to glaucoma in persons aged 40 years and over per 100,000 population for England, the Yorkshire and the Humber, and North East Lincolnshire UA, 2010/11 to 2015/16



Source: Public Health England

\* no local data for 2011/12 or 2015/16 as the value has been suppressed for disclosure control due to small counts

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

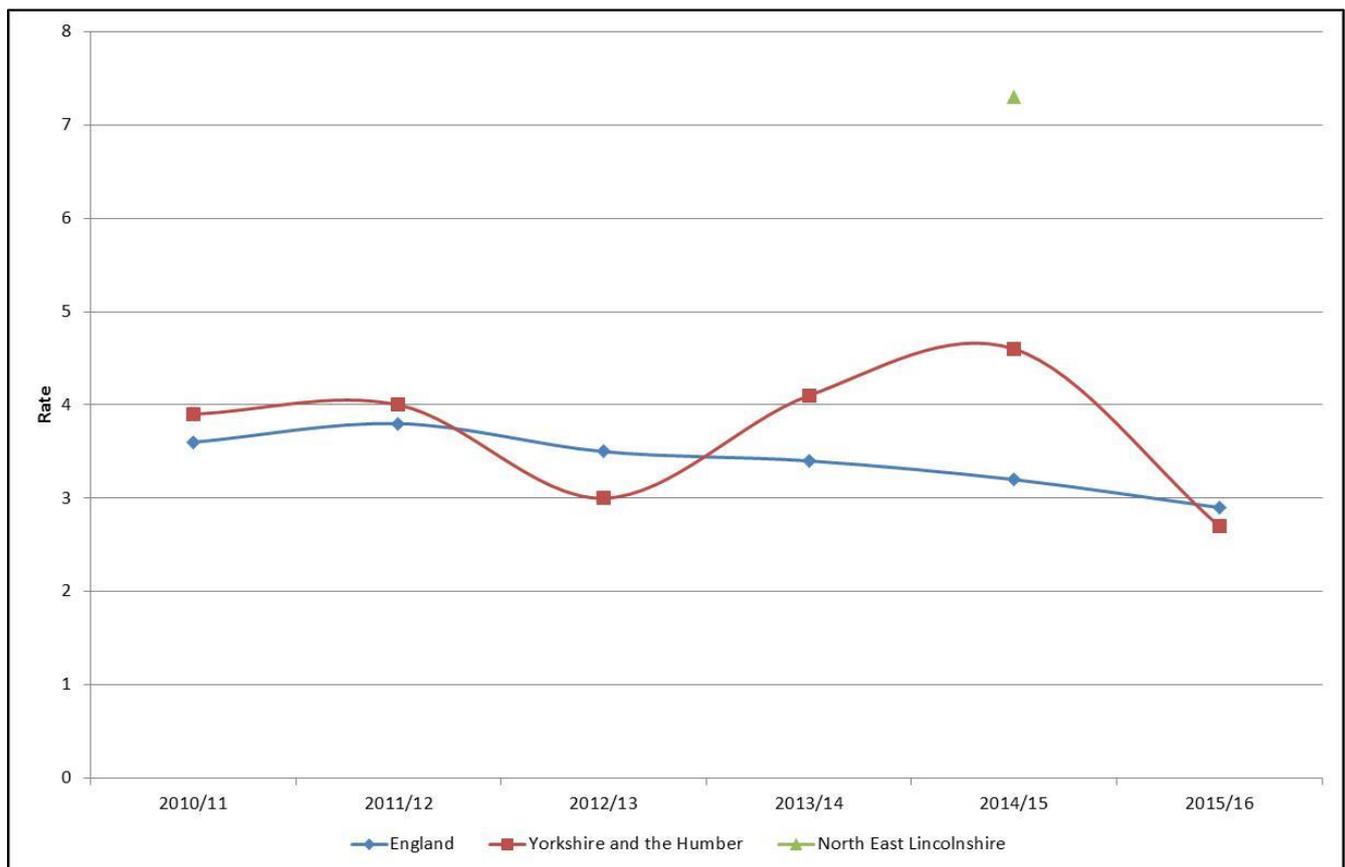
## PHOF 4.12iii

Figures presented in Figure 6 show that the North East Lincolnshire rate of sight loss due to glaucoma in persons aged 40 years has risen over recent years and is now higher than both the England and regional rates. The actual numbers of new CVIs due to diabetic eye disease as the main cause of sight loss or if no main cause as a contributory factor, are shown for North East Lincolnshire in the table below.

Period	Number of NEL CVIs due to diabetic eye disease
2010/11	*
2011/12	*
2012/13	*
2013/14	*
2014/15	10
2015/16	*

Source: Public Health England

**Figure 7** Trend for crude rates of sight loss due to diabetic eye disease in persons aged 40 years and over per 100,000 population for England, the Yorkshire and the Humber, and North East Lincolnshire UA, 2010/11 to 2015/16



Source: Public Health England

\* no local data for 2010/11, 2011/12, 2012/13, 2013/14 or 2015/16 as the value has been suppressed for disclosure control due to small counts

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

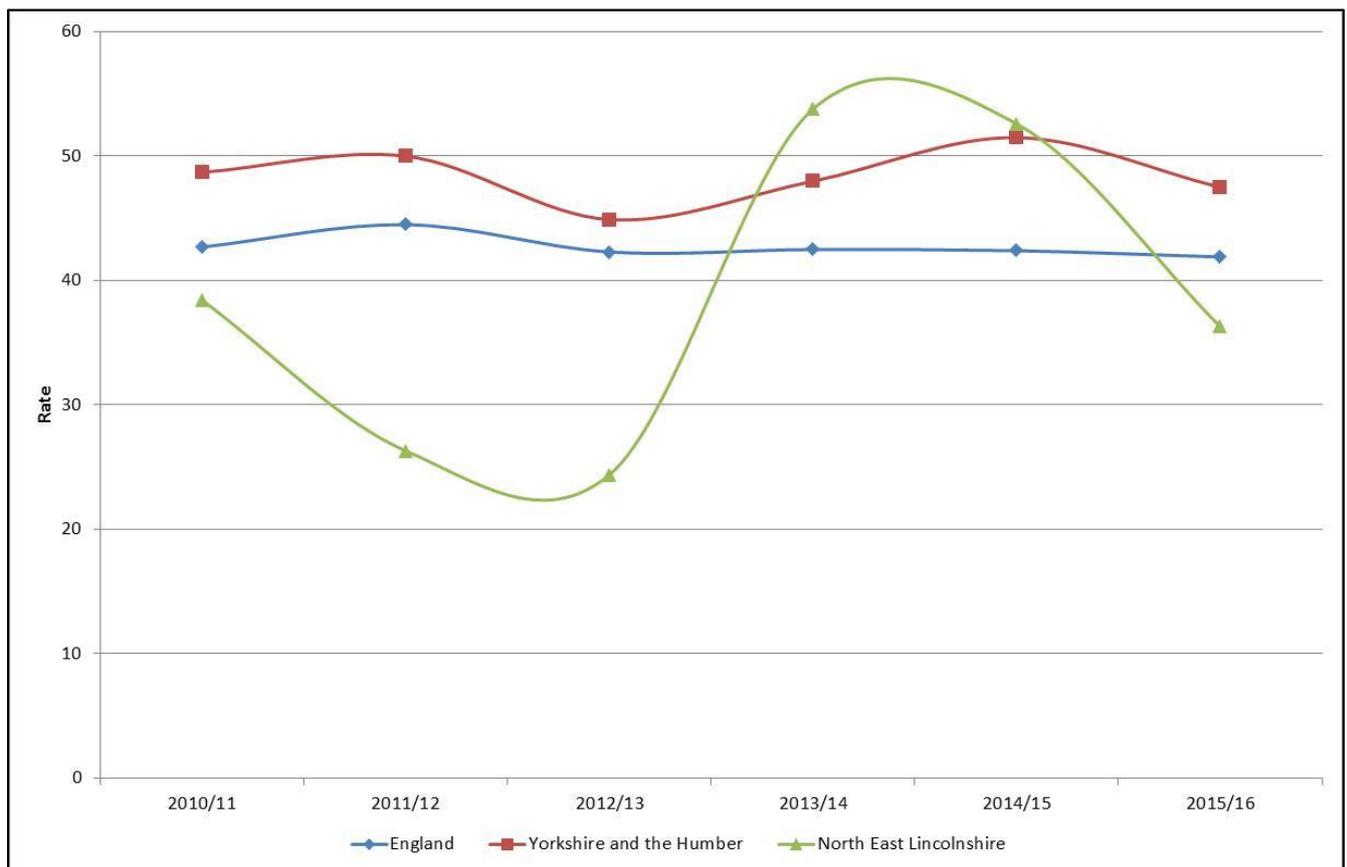
## PHOF 4.12iv

Figures presented in Figure 8 show that the North East Lincolnshire rate of new CVIs is now lower than both the England and regional rates, however this has fluctuated over recent years. The actual numbers of new completions of CVIs (all causes – preventable and non-preventable) by a consultant ophthalmologist, for North East Lincolnshire, are shown in the table below.

Period	Number of new NEL CVIs
2010/11	61
2011/12	42
2012/13	39
2013/14	86
2014/15	84
2015/16	58

Source: Public Health England

**Figure 8** Trend for crude rates of sight loss certifications per 100,000 population for England, the Yorkshire and the Humber, and North East Lincolnshire UA, 2010/11 to 2015/16



Source: Public Health England

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

## Visual Impairment Projections

The Projecting Adult Needs and Service Information (PANSI) and Projecting Older People Population Information (POPPI) systems, provide population data and projections of the numbers, characteristics and care needs, of people aged 18+ in England at local authority level. The system is provided by the Institute of Public Care on licence from the Department of Health.

Figures for adult (18-64) visual impairment are based on 'The prevalence of visual impairment in the UK, A review of the literature', by Tate, Smeeth, Evans, Fletcher, Owen and Rudnicka, RNIB, 2005. The prevalence rates from this report have been applied to ONS population projections for the 18-64 population to give estimated numbers predicted to have a serious visual impairment and require help with daily activities.

### North East Lincolnshire population aged 18-64 predicted to have a serious visual impairment

	2017	2020	2025
People aged 18-64	61	60	59

Source: PANSI

Figures for older people (65+) visual impairment are taken from 'The number of people in the UK with a visual impairment: the use of research evidence and official statistics to estimate and describe the size of the visually impaired population', Nigel Charles, RNIB, July 2006. The prevalence rates from this report have been applied to ONS population projections for the 65+ population to give estimated numbers predicted to have a visual impairment. Of those aged 75 and over, approximately half have cataracts or refractive error (i.e. correctable sight loss) and if these are excluded, the prevalence estimate of those with 'registrable' eye conditions is 6.4% in this age group. A small proportion have both cataracts and some other registrable cause of vision impairment and these are included within this figure. Age related macular degeneration is the most common cause of registerable sight loss in older people.

### North East Lincolnshire population aged 65+ predicted to have a moderate or serious visual impairment

	2017	2020	2025
People aged 65-74	958	980	980
People aged 75+	1848	1984	2319

Source: POPPI

### North East Lincolnshire population aged 75+ predicted to have registrable eye conditions

	2017	2020	2025
People aged 75+	954	1024	1197

Source: POPPI

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

## North East Lincolnshire Council Registrations

Registration with the local authority entitles a person to certain concessions and allowances. For people to be registered as blind or partially sighted they must have a Certificate of Vision Impairment from a consultant ophthalmologist; the certificate is sent to the social services department and to the certifications office at Moorfields Eye Hospital. People that have a Certificate of Vision Impairment choose whether or not to be included in their local authority's register of blind or partially sighted people; registration is not automatic. This means that not everybody that has been certified as having vision impairment is recorded on a local authority register. Therefore these figures cannot be considered as definitive numbers of blind and partially sighted people.

NHS Digital collect and publish data on people registered blind or partially sighted every three years for all local authorities with adult social services responsibilities in England.

<b>North East Lincolnshire Council Registrations</b>	<b>Number</b>
Number of blind people registered as at 31 March 2014	85
Number of partially sighted people registered as at 31 March 2014	90
Blind people registered as new cases during 2013/14	25
Partially sighted people registered as new cases during 2013/14	70

Source: NHS Digital

Source: [http://content.digital.nhs.uk/socialcare/collections#Summary of the Registers of People who are Blind or Partially Sighted](http://content.digital.nhs.uk/socialcare/collections#Summary%20of%20the%20Registers%20of%20People%20who%20are%20Blind%20or%20Partially%20Sighted) Data Collection (SSDA902)

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

## RNIB Sight Loss Data Tool

The RNIB sight loss data tool provides information about blind and partially sighted people and those at risk of sight loss at a local level. The tool is the UK's biggest collection of eye health datasets. This tool should be referred to in its own right at the following address, however a range of information sourced from this tool (version 3.5) is presented in the section below

<http://www.rnib.org.uk/knowledge-and-research-hub-key-information-and-statistics/sight-loss-data-tool>

### Living with sight loss

As of 2016 there are estimated 5320 people living with some degree of sight loss in North East Lincolnshire (3420 mild sight loss, 1180 moderate sight loss, and 710 severe sight loss). It is estimated that 3.3% of the North East Lincolnshire population are living with sight loss compared to 3.1% of the England population. By 2030 it is estimated that there will be 7050 people in North East Lincolnshire living with sight loss which is an increase of 32.5%. By 2030 the number of people living with severe sight loss is estimated to be 980 which is an increase of 38%.

### Children and young people

In North East Lincolnshire there are 64 children aged 0-16 years, 8 young people aged 17-18 years, and 27 young people aged 19-25 years, estimated to be blind and partially sighted.

As at the January 2017 school census there were 28 pupils with a statement of special educational needs (SEN) with vision impairment as their primary SEN (DfE SFR37/2017).

### Cost of sight loss

There are a number of different costs associated with the provision of eye health services, such as direct costs which includes inpatient procedures, outpatient procedures, residential and community care services and the ongoing treatment of eye conditions. There are also indirect costs caused by sight loss, including the provision of unpaid care by family and friends to those with sight loss, lower employment and absenteeism.

In NHS programme budgets, the combined spend on problems of vision in NHS North East Lincolnshire is £6.1 million, or £34 per person. The proportion of overall programme budget spend on problems of vision is 2.3%.

The total indirect cost of sight loss is estimated to be £14.5 million.  
The indirect cost of sight loss per person is estimated at £94.

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

## Sight threatening eye conditions

There are a number of people who are living with a sight threatening eye condition. The most common conditions include age-related macular degeneration (AMD), cataract, glaucoma, and diabetic retinopathy. The number of people with these conditions also includes people in the early stages of these diseases who have not yet experienced any reduction in their vision. As the North East Lincolnshire population changes over time, the level of sight threatening conditions are predicted to increase as presented in the two tables below.

## Projected number of people at risk of or living with sight loss due to sight threatening eye conditions, North East Lincolnshire, 2016 to 2030

	2016	2020	2025	2030
Early stage AMD	7070	7740	8340	8940
Late stage dry AMD	540	610	680	760
Late stage wet AMD	1110	1230	1390	1590
Cataract	1720	1940	2150	2450
Glaucoma	1500	1530	1570	1590
Diabetic retinopathy	3160	3150	3190	3230
Of which is severe diabetic retinopathy	290	290	290	300
Adults with diabetes	10380	10540	10930	11290

Source: RNIB Sight Loss Data Tool Version 3.5

## Projected percentage change in the number of people at risk of or living with sight loss due to sight threatening eye conditions in North East Lincolnshire between 2016 and 2030

	Change
Early stage AMD	26%
Late stage dry AMD	41%
Late stage wet AMD	43%
Cataract	42%
Glaucoma	6%
Diabetic retinopathy	2%
Of which is severe diabetic retinopathy	3%
Adults with diabetes	9%

Source: RNIB Sight Loss Data Tool Version 3.5

# NE LINCOLNSHIRE JSNA INDICATOR SUMMARY

## Support

The provision of emotional and practical support at the right time can help people who are experiencing sight loss to retain their independence and access the support they need. Patient experience at the eye clinic is crucial as it is here that people receive their diagnosis, undergo treatment, and potentially go through the process of receiving a CVI.

When diagnosed with an eye condition, patients attend a hospital appointment with an ophthalmology specialist. Outpatient appointments for Northern Lincolnshire and Goole NHS Foundation Trust are presented in the table below.

### Ophthalmology appointments, 2013/14 to 2015/16

	2013/14	2014/15	2015/16	Percentage change 2013/14 to 2015/16	Access to RNIB qualified sight loss advisor (ECLD, VSO) June 2017
NLAG	44408	45328	47056	6%	No

Source: RNIB Sight Loss Data Tool Version 3.5

In North East Lincolnshire, there were 220 blind and partially sighted people claiming Disability Living Allowance (DLA) in 2016.

In England, the Department of Transport publishes data each year regarding blue badges. In North East Lincolnshire, 33 blue badges were issued in 2015/16. 115 blue badges were held by people registered blind in 2016, which represents 135% of people who are registered blind. The numbers of blue badges issued between 2009/10 and 2015/16 are presented in the table below.

### Blue badges issued to people registered blind, North East Lincolnshire, 2009/10 to 2015/16

	2009/10	2010/11	2011/12	2012/13	2013/14	2015/16
Number of blue badges issued	72	59	22	45	47	33

Source: RNIB Sight Loss Data Tool Version 3.5

\* Figure for 2014/15 unavailable

## Falls and other health conditions and disabilities

There are other health conditions and disabilities which are relevant to services for blind and sighted people. For instance, sight loss is linked to age, and as people get older they may be living with a number of different sight conditions at the same time. Strokes can sometimes result in sight loss or visual dysfunction.

Estimates suggest that 1031 people are living with some degree of dual sensory loss. Of these people it is estimated that 349 are living with severe dual sensory loss.

Falls are more common and also more likely to have serious outcomes amongst older people. In North East Lincolnshire as of 2015 it is estimated that 667 people with sight loss aged over 65 years, experience a fall per year, of which 315 are directly attributable to sight loss.

Source: RNIB Sight Loss Data Tool Version 3.5

<b>Public Data Sources:</b>	<a href="http://www.phoutcomes.info/">http://www.phoutcomes.info/</a> <a href="http://www.rnib.org.uk/knowledge-and-research-hub-key-information-and-statistics/sight-loss-data-tool">http://www.rnib.org.uk/knowledge-and-research-hub-key-information-and-statistics/sight-loss-data-tool</a>
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