

Key facts about vision impairment in children and young people

A number of sight loss sector organisations have assessed and agreed a series of key facts for everyone to use. The way they are worded should not be altered in any way as doing so may make them wrong.

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Key facts

- 1. Based on the WHO international classification of childhood vision impairment (Appendix A), two in every 1,000 (0.2 per cent) children and young people up to the age of 25 in the UK have vision impairment (Refs 1, 2, 3, 4). This estimate does not include children with 'mild' vision impairment whose level of vision is better than the acuity threshold in the WHO definition; some of these children may have additional difficulties with their vision that have implications for learning and development, particularly when combined with other disabilities/special educational needs (SEN), for example, eye movement problems, or problems with the way that the brain interprets visual information.
- 2. An estimated 0.05 per cent (5 in every 10,000) of children up to the age of 16 are severely sight impaired/blind. This group of children is included within the overall 0.2 per cent estimate (**Ref: 19**).
- Those at higher risk of vision impairment are very premature and very low birth weight babies (Refs: 1, 8, 16, 19), children from the most economically deprived social backgrounds (Refs: 5, 6, 9, 19) children and young people from some South Asian ethnic groups (Refs: 8, 19, 22), and those with learning disabilities (Ref: 7).
- 4. An estimated 0.031 per cent (31 in every 100,000) children and young people up to the age of 19 in the UK have co-occurring vision and hearing impairments (**Ref: 23**). The WHO does not have a definition of deafblindness, and as deafblindness involves the interaction of visual acuity and decibel loss, it is not possible to express this in a single measure. However, this statistic applies to CYP who are more severely impaired.
- 5. Approximately 5.6 per cent of children with learning disabilities are estimated to have vision impairment. The term 'learning disability' applies to children and young people with moderate, severe or profound and multiple learning disabilities (MLD, SLD and PMLD). It does *not* include specific learning difficulties such as dyslexia (Ref: 7).

6. The estimated numbers of children and young people with vision impairment in the UK and England (calculated from the ONS 2015 mid-year detailed population statistics, **Ref: 18**) are:

UK	England
Ages 0-16: 25,867	Ages 0-16: 21,923
Ages 0-18: 28,948	Ages 0-18: 24,511
Ages 0-25: 40,947	Ages 0-25: 34,558

For further information about population estimates see the RNIB Sight Loss Data Tool **Ref: 21**).

- 7. In England, there are more than 26,000 children and young people aged 0-25 known to local authority Visual Impairment (VI) specialist education services (**Ref: 15**). Included in this figure are 9,535 aged 0-17 registered as blind or partially sighted (**Ref: 13**). The registration figures under-represent the true number as not all children and young people who are eligible are registered, and some local authorities do not hold a register for children.
- 8. Around 50 per cent of children and young people with vision impairment have additional special educational needs or disabilities (**Refs: 5, 6, 9**).
- It has been proposed that the population of children with vision impairment can be thought of as two distinct sub-populations: those with and those without additional SEND (although there is considerable diversity within each of these two sub-groups) (Ref: 20).

Experiences of health, education and social care are different for children with vision impairment as their sole disability, compared to those with vision impairment and additional SEND. Children with vision impairment and additional SEND are also at increased risk of poorer outcomes on a range of wellbeing and educational outcome measures (**Ref: 9**).

10. Two thirds of childhood vision impairment is present from birth or diagnosed in the first year of life (**Ref: 19**). The causes of vision impairment in childhood are very different from the causes in adults. Many children and young people have more than one sight disorder causing their vision impairment. The most common causes are: cerebral vision impairment (CVI). disorders of the optic nerve (particularly optic atrophy), and disorders of the retina. The single most common cause is CVI, which is where there has

been damage to the visual pathways in the brain, affecting the way that visual information is processed. CVI accounts for up to 48 per cent of blindness and between 32 per cent and 45 per cent of all vision impairment in children (**Refs: 16, 17**).

- **11.** Children and young people with vision impairment are more likely than children without vision impairment to live in families that experience social and economic disadvantage (**Refs: 5, 6, 9**).
- 12. Approximately 7 in 10 children and young people with vision impairment are educated in mainstream schools and around one in 3 in generic special schools. Very few are in schools designated for pupils with vision impairment; most children in these schools have additional complex needs (**Ref: 14**).
- The educational attainment of pupils with vision impairment up to the age of 16 is higher, on average, than any other SEND group, but not as good as pupils with no SEND. However, the gap is far smaller for pupils with vision impairment as their only SEND (**Refs:** 5, 6).
- 14. In 2015, more than one in three young people aged 16 to 25 with vision impairment in the UK were students in further or higher education. In comparison, approximately one in four 16 to 25-year olds in the general population were students. (**Ref: 12**).
- 15. In 2014/15, 5,580 young people with vision impairment under the age of 19 in England participated in further education or skills training (this includes apprenticeships and work based learning). This is 6 in every 1,000 students aged under 19. A similar proportion of students aged 18 to 25 (5 in every 1,000) have a vision impairment. (**Ref: 12**)
- **16.** 2,500 higher education/university undergraduate students in the UK had vision impairment in 2014 and 725 post graduate students were also vision impaired. This is one in every 1,000 students (0.1 per cent). (**Ref: 10**)
- **17.** 38 per cent of young people aged 16 to 25 who are long term disabled with a seeing difficulty are not in employment, education or training (NEET). They are almost twice as likely to be NEET as the general population of 16 to 25 year olds (**Ref: 11**).

References

- 1. Cumberland, P M, Pathai S and Rahi J S (2010) 'Prevalence of eye disease in early childhood and associated factors: findings from the millennium cohort study'. **Ophthalmology** 2010, 117: 2184-2190.
- 2. Rogers M (1996) 'Vision impairment in Liverpool: prevalence and morbidity' Archives of Disease in Childhood, 74: 299 303
- Flanagan N M, Jackson A J and Hill A E (2003) 'Visual impairment in childhood: insights from a community-based survey' Child: Care, Health and Development 2003, Vol 29, Pt 6, pp 493 - 499
- Bone M and Meltzer H (1989) OPCS surveys of disability in Great Britain Report 3: The prevalence of disability among children London: HMSO
- 5. Bassett P (2010) Educational progress of young blind and partially sighted pupils. Statsconsultancy for RNIB.
- 6. Chanfreau J and Cebulla A, 2009. Educational attainment of blind and partially sighted pupils. National Centre for Social Research (NatCen) for RNIB.
- 7. Emerson E and Robertson J (2011) The estimated prevalence of visual impairment among people with learning disabilities in the UK. CeDR, Lancaster University/Learning Disabilities Observatory report for RNIB and SeeAbility
- Hamblion E L, Moore A T and Rahi J S (2012) 'Incidence and patterns of detection and management of childhood-onset hereditary retinal disorders in the UK. British Journal of Ophthalmology 2012, 96: 360-365
- 9. Harris J, Keil S, Lord C and McManus S, 2012. Sight impaired at age seven: Secondary analysis of the Millennium Cohort Study. RLSB, RNIB and NatCen Social Research.
- Equality Challenge Unit (2015) Equality in higher education: statistical report 2015
- Hewett R with Keil S (2016) Investigation of data relating to blind and partially sighted people in the Quarterly Labour Force Survey: October 2012 - September 2015 VICTAR, University of Birmingham for RNIB.

- 12. FE Data Library: Equality and Diversity (2016) Equality and diversity data tables: 2008 to 2009 and 2014 to 2015 https://www.gov.uk/government/statistical-data-sets/fe-data-libraryequality-and-diversity
- Health and Social Care Information Centre (2014) Registered blind and partially sighted people. Year ending 31 March 2014, England. <u>http://www.hscic.gov.uk/catalogue/PUB14798</u>
- 14. Keil S, 2012. RNIB survey of VI services in England and Wales 2012: Report for England. RNIB
- **15.** Keil (2016) Freedom of Information (FOI) questions on **local authority education provision for children and young people with vision impairment in England: 2015**. RNIB
- **16.** Mitry, D. Bunce, C. Wormald, R. and Bowman R (2013) 'Childhood vision impairment in England: a rising trend'. **Archives of Disease in Childhood** 2013; 98: 378-380.
- Mitry D, Bunce C, Wormald R, Leamon S, Simkiss P, Cumberland P, Rahi J and Bowman R (2013) Causes of certifications for severe sight impairment (blind) and sight impairment (partial sight) in children in England and Wales. British Journal of Ophthalmology 2013; 97: 1431-1436.
- 18. ONS (2016), 2015 mid-year detailed population estimates, Office for National Statistics <u>https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulation estimates/latest</u>
- 19. Rahi J and Cable N (2003) 'Severe visual impairment and blindness in children in the UK' **The Lancet**, Vol 362, Oct 25, 2003
- Rahi JS, Cumberland PM, Peckham CS, 2010. Improving Detection of Blindness in Childhood: The British Childhood Vision Impairment Study. Pediatrics 2010;126;e895 –e903
- 21. Sight Loss Data Tool (RNIB 2016) <u>http://www.rnib.org.uk/knowledge-and-research-hub-key-information-and-statistics/sight-loss-data-tool</u>
- Solebo A L and Rahi J S (2014) Epidemiology, aetiology and management of visual impairment in children. Arch Dis Child 2014, 99: 375-379

23. Calculated by Sense (2014) based on estimates from: Robertson J and Emerson E (2010) Estimating the Number of People with Co-Occurring Vision and Hearing Impairments in the UK. Centre for Disability Research (CeDR), Lancaster University for Sense.

Appendix A

World Health Organisation (WHO) definition of blindness and visual impairment

Blindness is defined as a presenting visual acuity of less than 3/60, or a corresponding visual field loss to less than 10° in the better eye with the available correction.

Severe visual impairment is defined as a presenting visual acuity of between less than 6/60 and 3/60

Moderate visual impairment is defined as a presenting visual acuity of less than 6/18 to 6/60. In this document "visual impairment" includes both severe and moderate visual impairment.

For further information see: http://www.who.int/blindness/en/