



BWRDD PARTNERIAETH RHANBARTHOL  
**GOGLEDD CYMRU**  
**NORTH WALES**  
REGIONAL PARTNERSHIP BOARD

# Statistics about neurodevelopmental conditions in children and young people in North Wales

## December 2023

Mae'r ddogfen hon ar gael yn Gymraeg. This document is available in Welsh.



## Contact us

North Wales Regional Innovation Coordination Hub

County Hall, Wynnstay Road, Ruthin, LL15 1YN

Email: [nwrich@denbighshire.gov.uk](mailto:nwrich@denbighshire.gov.uk)

Phone: 01824 712432

[Website: www.northwalescollaborative.wales/statistics/](http://www.northwalescollaborative.wales/statistics/)

# Contents

Introduction .....	4
Main points.....	6
Number of children and young people in the population (aged 0-17).....	8
Prevalence of autism.....	10
Prevalence of attention deficit hyperactivity disorder (ADHD).....	11
Prevalence of dyslexia, dyspraxia, and dyscalculia.....	13
Dyslexia.....	13
Dyspraxia.....	13
Dyscalculia .....	13
Number of children with additional learning needs .....	14
Disability Living Allowance benefits data.....	20
Predictions for the future .....	23
Appendix: neurodiversity statistics for primary care clusters .....	24

## Introduction

This bulletin was produced by the North Wales Regional Innovation Coordination Hub in December 2023. It will form part of the programme of updates to the Population Needs Analysis and a copy will be available on the North Wales Regional Partnership Board's website. We aim to review this bulletin every year and add new data as it becomes available.

There is no full register of children and young people with neurodevelopmental conditions, so we rely on a range of proxy data sources. There are definitional differences in what these sources are counting, and significant variances in how broadly they capture the population of children with neurodevelopmental conditions in North Wales. However, it is worth looking at each source to get a more complete picture.

We are not currently able to include NHS data about diagnoses, referrals and waiting lists in this report as the data is not currently in the public domain. If the data becomes available we will add it to the bulletin, which we hope to update on an annual basis.

Where possible we have looked at the latest data and provided a comparison with what was happening 10 years previously, to help measure changes over time. The time periods that are measured by different data sources do not match. The age range that is defined as 'child' also differs between sources – where possible any denominators (for example population base when working out a percentage) have been matched to the source data.

Estimates of population numbers have been revised following the release of results from the 2021 Census, so what we understand about population trends has changed since the 2022 Population Needs Assessment was published. This means that some numbers, rates, and percentages will look significantly different from what we have seen before, and some data sources that we have used previously are no longer considered reliable (in particular, projections and forecasts based on past trends).

The prevalence calculations we have used in this bulletin apply rates separately for males and females. Totals are calculated by adding the figures for male and female, and not from applying the 'average' prevalence rates for the population.

Prevalence rates used in this bulletin are presumed to remain stable across populations – that is, apart from the male/female split we use the same prevalence rates for all population groups. In reality there are variances between different socio-economic groups and different ethnic and cultural groups, but we do not have the data that would allow us to apply prevalences at a more granular level than the consensus estimates we have used.

The Covid-19 pandemic disrupted data continuity and comparability for some datasets – either because data collection changed or stopped altogether, or because people behaved differently and so weren't counted in the same way or in the same places. We have noted where this is likely to have affected the data in this report.

Figures for neurodiversity indicators are available in the main body of the report at North Wales and unitary authority level. Some indicators are available at primary care cluster level, and these are available in the appendix.

## Main points

- The latest population estimates (2022) put the total number of children aged 0-17 in North Wales at about 133,650. The number has fallen by about -6,250 between 2012 and 2022.
- Despite this, the number of children in North Wales schools who are statemented and have additional learning needs related to autism has risen from about 1,485 in 2017 to about 2,135 in 2023. Numbers and rates have increased in all local authority areas. Numbers are particularly high in Conwy and Denbighshire where there are specialist schools.
- For North Wales as a whole the number of children with additional learning needs related to attention deficit hyperactivity disorder (ADHD) has fallen slightly in the same period from about 860 in 2017 to 790 in 2023. However, some areas have seen an increase and some a decrease so there is no overall pattern across the region (Children may have been counted within both the autism and the ADHD category for this data set).
- For dyslexia, dyspraxia, and dyscalculia the numbers and rates for children who have additional learning needs and are statemented or have school or individual action plan in place have fallen significantly between 2017 and 2023 for all local authority areas in North Wales. This is likely to be due to policy changes in how support is provided in schools for these conditions, and how the statementing process is implemented.
- Disability Living Allowance benefits data can also give us an insight into the number of neurodiverse children and young people within our population. In May 2023 most of the child Disability Living Allowance caseload in North Wales had one of three main disabling conditions – learning difficulties behavioural disorders and hyperkinetic syndrome. Though not exclusively so – and not to the exclusion of other conditions – these are the categories most likely to be used to classify neurodiverse children who receive DLA benefits.
- These categories accounted for 76% or 5,490 children in total, which had increased from 61% or 2,520 children in May 2013. Most of the increase came from the behavioural disorders category, which accounted for more than five times as many children in 2023 as it had 10 years previously.

- The significant growth in the behavioural disorder and learning difficulties categories in the ten years between May 2013 and May 2023 may be due to a number of factors other than a straightforward growth in the prevalence of these conditions – for example an increase in diagnoses due to increased awareness in medical and care staff; an increase in children with these disorders living in community settings rather than in medical or care establishments; or an increase in families and carers seeking help for children with these disabilities. More work may be needed to understand these changes.

## Number of children and young people in the population (aged 0-17)

Baseline population data forms the basis of our understanding of any change in the numbers, rates, and percentages we may look at in relation to the social care and well-being issues we are specifically interested in.

The latest population estimates (2022) put the total number of people aged 0-17 in North Wales at about 133,650.

**Figure 1: number of people aged 0-17 in North Wales local authorities**

Area	2022 number	2022 percent	2012 number	2012 percent	Change 2011-21
Anglesey	13,100	19.0%	13,600	19.4%	-500
Gwynedd	21,850	18.6%	23,650	19.5%	-1,800
Conwy	20,550	18.0%	21,850	18.9%	-1,300
Denbighshire	19,300	20.0%	19,300	20.5%	0
Flintshire	30,900	19.9%	32,300	21.2%	-1,450
Wrexham	27,950	20.6%	29,150	21.5%	-1,200
North Wales	133,650	19.4%	139,850	20.3%	-6,250

Numbers have been rounded so may not sum to total.

Percentage is of the total population of the area.

Source: mid-year population estimates, Office for National Statistics

Overall, the number of children and young people in the population has been decreasing across North Wales in the past decade. In all areas children and young people also make up a smaller proportion of the population in 2022 than in 2012. The number of children and young people aged 0-17 in North Wales has fallen by about -6,250 in that period.

The proportion of children in the population is generally low in North Wales when compared to the England and Wales average of 20.8%.

Both the overall number of births and birth rates have fallen in all local authority areas between 2012 and 2022 and have been on a general downward trend since the 1970s. Birth rates are below natural population replacement levels across North Wales.



Net out-migration of young adults in some areas has also had an impact on the number of children in the population, as it reduces the number of women of child-bearing age in the population.

All these trends are likely to continue in the future.

## Prevalence of autism

A 2021 study from Cambridge and Newcastle Universities has suggested that around one in 57 children in the UK is on the autistic spectrum (1.76% or 17.6 per 1,000), significantly higher than previously reported. This was an increase from a 2009 study by the same team which had suggested that one in 64 children were autistic (1.57% or 15.7 per 1,000).

The researchers say the increase in prevalence is likely to be because autism has become better recognised by both parents and schools in recent years. Given that awareness and understanding of neurodiversity is continuing to develop, it is likely that these new rates are an underestimation, and that future research will see further increases in prevalence. [Research suggests autism is underdiagnosed in girls and women](#), so figures for females are particularly likely to be an undercount. This underdiagnosis is thought to be a result of a combination of the way girls and women present the condition, the way they can socially adapt or mask their symptoms better than boys and men, and partly due to long established preconceptions that autism is predominantly a 'male' condition.

In the 2021 study, boys showed a prevalence of autism of 2.8% and girls showed a prevalence of 0.65%.

**Figure 2: estimate of number of people aged 0-17 with autism spectrum disorders in North Wales**

Area	2022 boys	2022 girls	2022 all children	2012 all children	Change 2012-22
Anglesey	190	40	230	240	-10
Gwynedd	310	70	380	410	-30
Conwy	300	70	360	380	-20
Denbighshire	280	60	340	340	0
Flintshire	440	100	540	560	-20
Wrexham	400	90	490	510	-20
<b>North Wales</b>	<b>1,920</b>	<b>420</b>	<b>2,340</b>	<b>2,450</b>	<b>-110</b>

Numbers have been rounded so may not sum to total.

Prevalence rates have been applied to mid-year population estimates differentially for boys (2.8%) and girls (0.65%) for each year.

Sources: mid-year population estimates, Office for National Statistics; Roman-Urrestarazu, R et al. Association of Race/Ethnicity and Social Disadvantage with Autism Prevalence in 7 Million School Children in England. JAMA Pediatrics; 29 March 2021

Using these latest prevalence rates we see an estimate of about 2,340 children in North Wales with autism spectrum disorders in 2022. This includes about 1,920 boys and 420 girls. Overall numbers are likely to have fallen slightly in the 10 years since 2012, in line with a decrease in the population aged 0-17 in the same period. The prevalence rates are applied uniformly across areas and across time periods, and do not take account of local variation or any predictions of change in prevalence over time.

Studies have also shown variances in prevalence rates between different socio-economic groups and different ethnic and cultural groups (Roman-Urrestarazu et al (2021) 'Association of Race/Ethnicity and Social Disadvantage With Autism Prevalence in 7 Million School Children in England'. JAMA Pediatrics). The highest prevalence was found in Black pupils (2.11%) and the lowest in Roma/Irish Travelers (0.85%). However, in North Wales we do not have the data that would allow us to apply prevalences at a more granular level than the consensus estimates we have used in figure 2.

## **Prevalence of attention deficit hyperactivity disorder (ADHD)**

Prevalence rates for attention deficit hyperactivity disorder (ADHD) are harder to estimate as there has been less research into the condition. The global prevalence of ADHD in children is estimated to be around 5%, while studies based on US populations (where rates of diagnosis and treatment tend to be highest) estimate the rate at between 8% and 10%.

The table below gives a lower range at 5% prevalence and an upper range at 10% prevalence. This would suggest that in 2022 in North Wales between 6,680 and 13,360 children and young people aged 0-17 have some level of ADHD.

**Figure 3: estimate of number of people aged 0-17 with attention deficit hyperactivity disorder in North Wales, 2022**

Area	Lower estimate	Upper estimate
Anglesey	660	1,310
Gwynedd	1,090	2,190
Conwy	1,030	2,060
Denbighshire	970	1,930
Flintshire	1,540	3,090
Wrexham	1,400	2,790
North Wales	6,680	13,360

Numbers have been rounded so may not sum to total.

The lower estimate uses a prevalence rate of 5% and the upper estimate uses a prevalence rate of 10% applied to the population estimate for that age group.

Sources: mid-year population estimates, Office for National Statistics; BMJ Best Practice (2022) Attention deficit hyperactivity disorder in children, BMJ Publishing Group.

There are three subtypes of ADHD:

- The inattentive subtype accounts for 20% to 30% of cases.
- The hyperactive-impulsive subtype accounts for around 15% of cases.
- The combined subtype accounts for 50% to 75% of cases.

ADHD is more commonly diagnosed in boys than girls. Prevalence ratios are generally estimated at 2–5:1, while clinical populations show a ratio as high as 10:1. This sex difference may be because boys present more often with disruptive behaviour that prompts referral, whereas girls more commonly have the inattentive subtype and have lower comorbidity with oppositional defiant disorder (ODD) and conduct disorder. (BMJ Best Practice (2022) Attention deficit hyperactivity disorder in children, BMJ Publishing Group.)

Levels of deprivation can also have a differential impact on ADHD diagnoses. Data from the UK primary care database showed prevalence of ADHD diagnoses nearly two times higher in areas within the most deprived quintile compared to the least deprived quintile.

Note: children may have been counted within both the autism and the ADHD estimates so the results from the tables in figures 2 and 3 should not be added to find a total.

## **Prevalence of dyslexia, dyspraxia, and dyscalculia**

There has been much less research into other neurodevelopmental conditions such as dyslexia, dyspraxia, and dyscalculia, and as a result our understanding of these conditions is much less advanced. There are no widely accepted prevalence rates or definitions of severity so we can't calculate estimates of the number of children and young people with these conditions with any certainty.

### **Dyslexia**

The British Dyslexia Association estimates that 10% of the UK population are dyslexic, including 4% of the UK population who are severely affected. Other resources and platforms suggest rates of 'from 3-5%' to '1 in 5' or a rounded '20%'. However, the original source for all these statistics is difficult to trace.

More information: <https://www.bdadyslexia.org.uk/>

### **Dyspraxia**

The Dyspraxia Foundation estimates that dyspraxia (also known as developmental coordination disorder or DCD) affects around 5% of school-aged children, which includes about 2% of children who are more severely affected. Difficulties continue into adolescence and adulthood in most cases.

They also state that males are more likely to be affected by dyspraxia/DCD than females, but females are often older when their difficulties are identified.

More information: <https://dyspraxiafoundation.org.uk/>

### **Dyscalculia**

The British Dyslexia Association estimates that 6% of people have dyscalculia. It also estimates that 25% of people have maths learning difficulties which can be caused either by other neurodiverse conditions such as dyslexia or external issues such as a traumatic learning experience related to maths or school absence. 60% of individuals with dyslexia will have difficulties with maths.

More information: <https://www.bdadyslexia.org.uk/dyscalculia>

## Number of children with additional learning needs

We have some additional information available from the Pupil Level Annual School Census (PLASC), which shows a slightly different picture. This data register captures information about children with additional learning needs (ALN), which is sometimes also called special educational needs (SEN). This data includes all children who have been statemented, or have a school action plan or an individual development plan. Data has only been collected since 2016/17 so we cannot look at a full ten year trend.

Note: children may have been counted within more than one category for this data set so the results from the tables in figures 4, 5 and 6 should not be added to find a total.

**Figure 4: pupils with autism in local authority maintained schools in North Wales**

Area	January 2023 number	January 2023 rate
Anglesey	200	21.2
Gwynedd	255	15.5
Conwy	540	35.6
Denbighshire	435	28.0
Flintshire	350	15.7
Wrexham	355	19.3
North Wales	2,135	21.9
Wales	10,560	23.1

Numbers have been rounded so may not sum to totals.

Rate is per 1,000 pupils in maintained schools in the area.

Source: ALN/SEN by type of need, Pupil Level Annual School Census, Welsh Government

The latest data that is available – for the 2022/23 School Census, which had a collection point of January 2023 – shows a total of around 2,135 children with autism who have additional learning needs within North Wales. This has increased from a total of around 1,485 children in 2016/17. This increase had taken place at a time when overall numbers of children in the population have been falling. In the same period rates in North Wales have risen from 14.6 per 1,000 pupils to 21.9 per 1,000 pupils.

**Figure 5: pupils with ADHD in local authority maintained schools in North Wales**

Area	January 2023 number	January 2023 rate
Anglesey	60	6.4
Gwynedd	85	5.2
Conwy	150	9.9
Denbighshire	185	11.9
Flintshire	145	6.5
Wrexham	165	9.0
North Wales	790	8.1
Wales	2,815	6.2

Numbers have been rounded so may not sum to totals.

Rate is per 1,000 pupils in maintained schools in the area.

Source: ALN/SEN by type of need, Pupil Level Annual School Census, Welsh Government

The number of pupils with additional learning needs related to attention deficit hyperactivity disorder has fallen slightly in the same period from about 860 in 2016/17 to 790 in 2022/23 for North Wales as a whole. However, some areas have seen an increase and some a decrease so there is no overall pattern across the region.

Rates vary between the different local authority areas in North Wales. Numbers and rates are significantly higher for Conwy and Denbighshire than would be expected from looking at the estimates of the prevalence of autism in particular. This is likely to be because of the specialist provision in Ysgol Plas Brondyffryn in Denbigh which is the North Wales regional centre for autism education, and Ysgol y Gogarth in Llandudno which is a specialist school for children who are statemented or undergoing the process of statementing.

The number of children with autism who have additional learning needs within North Wales is a close match for the estimates for the number of children in the overall population who are likely to have autism (see the 'Prevalence of autism' section of this report). This is a count of 2,135 children with autism in local authority schools compared to an estimate of 2,340 in the total population. However, this does not mean we have 'found' nearly all the children with autism in the region. It is more likely to point to an underestimation of prevalence. This underestimation is not a surprise. Though the most recent research about prevalence rates was published

relatively recently (in 2021) it used data from an earlier period and will not have picked up more recent trends around the increase in awareness and diagnosis. There is also some circularity between the additional learning needs data and the prevalence rates, as the research methodology relies heavily on data from schools in its calculations, so we might expect some harmonisation in the two datasets.

**Figures 6a and 6b: pupils with dyslexia, dyspraxia and dyscalculia in local authority maintained schools in North Wales, January 2023**

Area	Dyslexia number	Dyspraxia number	Dyscalculia number
Anglesey	150	50	15
Gwynedd	300	75	20
Conwy	305	30	25
Denbighshire	145	20	<5
Flintshire	125	15	10
Wrexham	270	40	25
North Wales	1,300	230	94

Area	Dyslexia rate	Dyspraxia rate	Dyscalculia rate
Anglesey	15.9	5.3	1.6
Gwynedd	18.3	4.6	1.2
Conwy	20.1	2.0	1.6
Denbighshire	9.3	1.3	-
Flintshire	5.6	0.7	0.4
Wrexham	14.7	2.2	1.4
North Wales	13.4	2.4	1.0
Wales	11.1	1.3	0.9

Numbers have been rounded so may not sum to totals.

Rate is per 1,000 pupils in maintained schools in the area.

Source: ALN/SEN by type of need, Pupil Level Annual School Census, Welsh Government

For dyslexia, dyspraxia, and dyscalculia the numbers and rates have fallen significantly between 2017 and 2023 for all local authority areas in North Wales for children who have additional learning needs and are statemented or have school or individual action plan in place. This is likely to be due to policy changes in how support is provided in schools for these conditions, and how the statementing process is implemented.



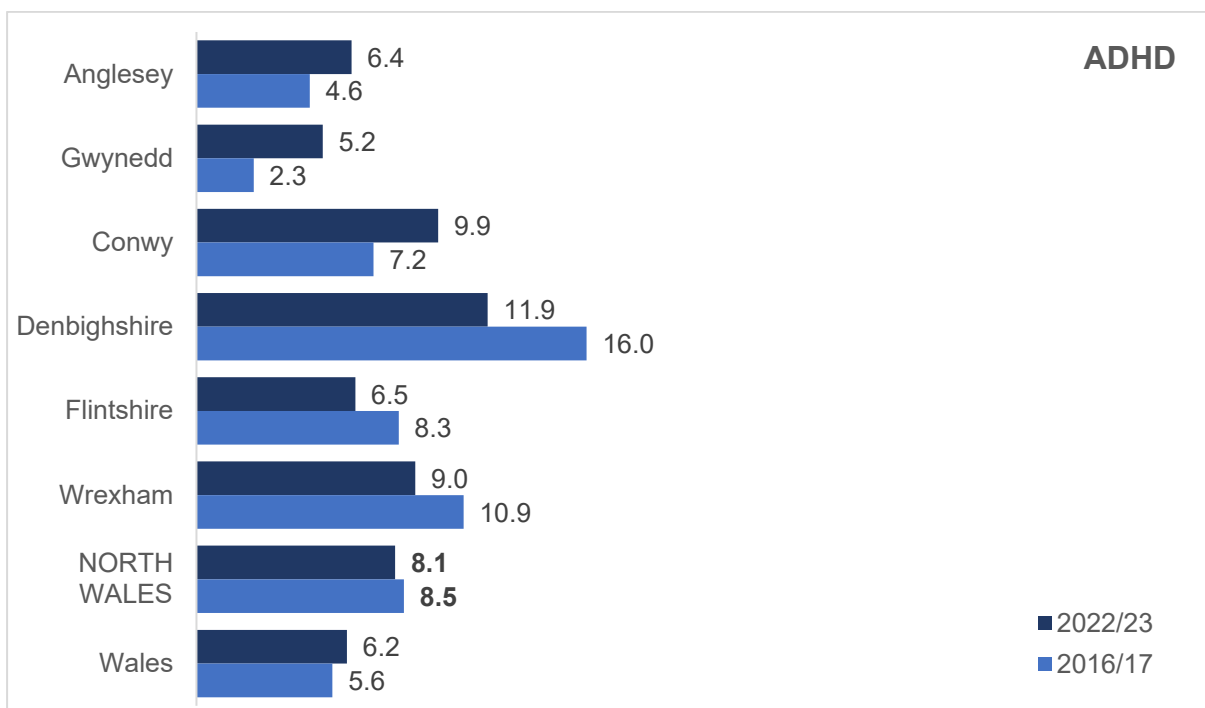
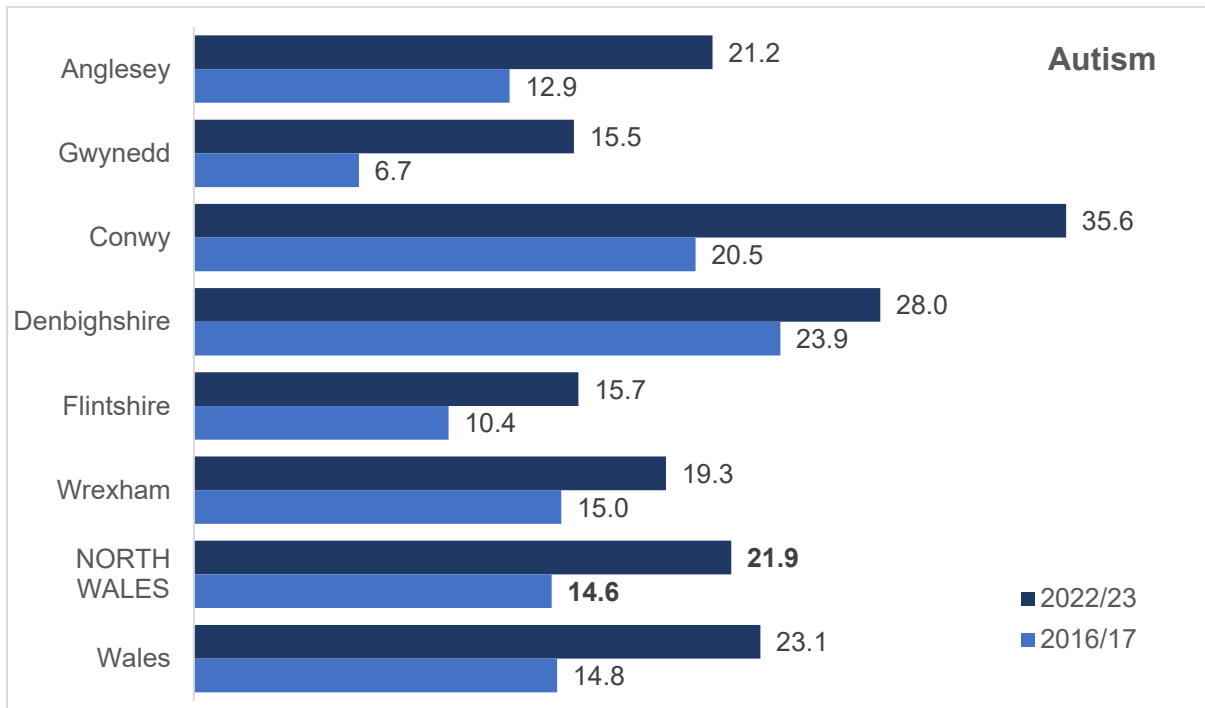
**Figure 7: pupils with additional learning needs in local authority maintained schools in North Wales – comparative rates for 2016/17 and 2022/23**

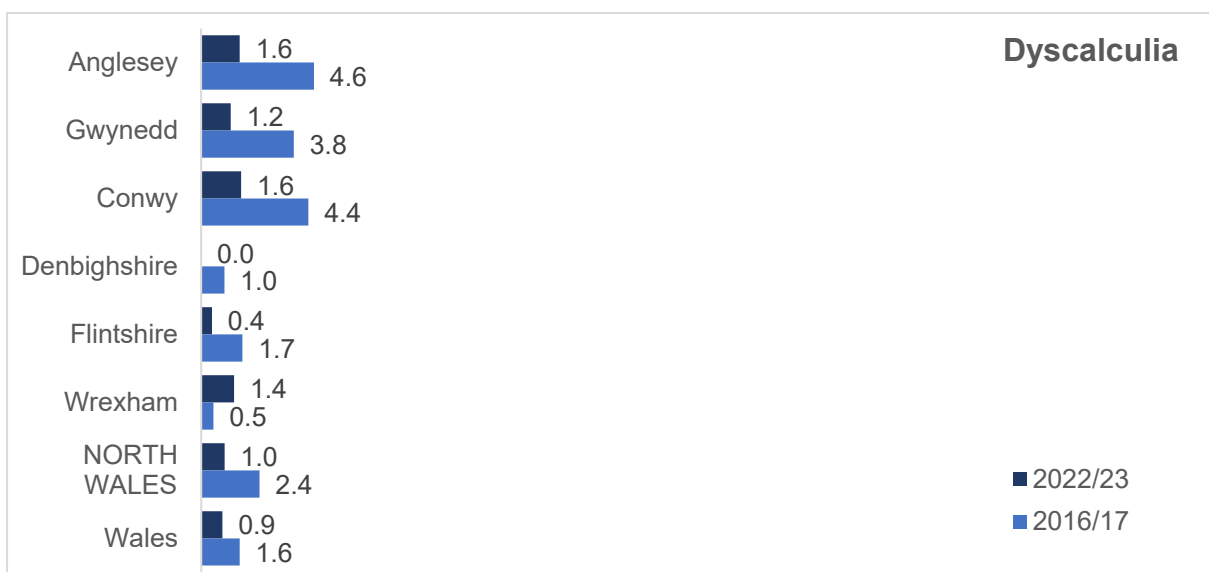
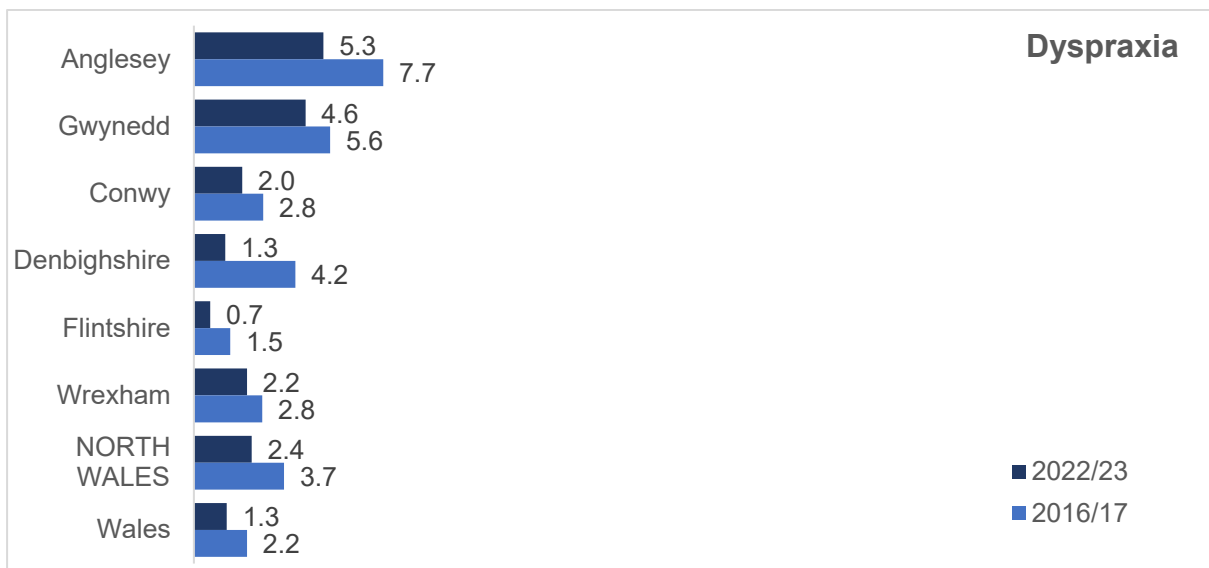
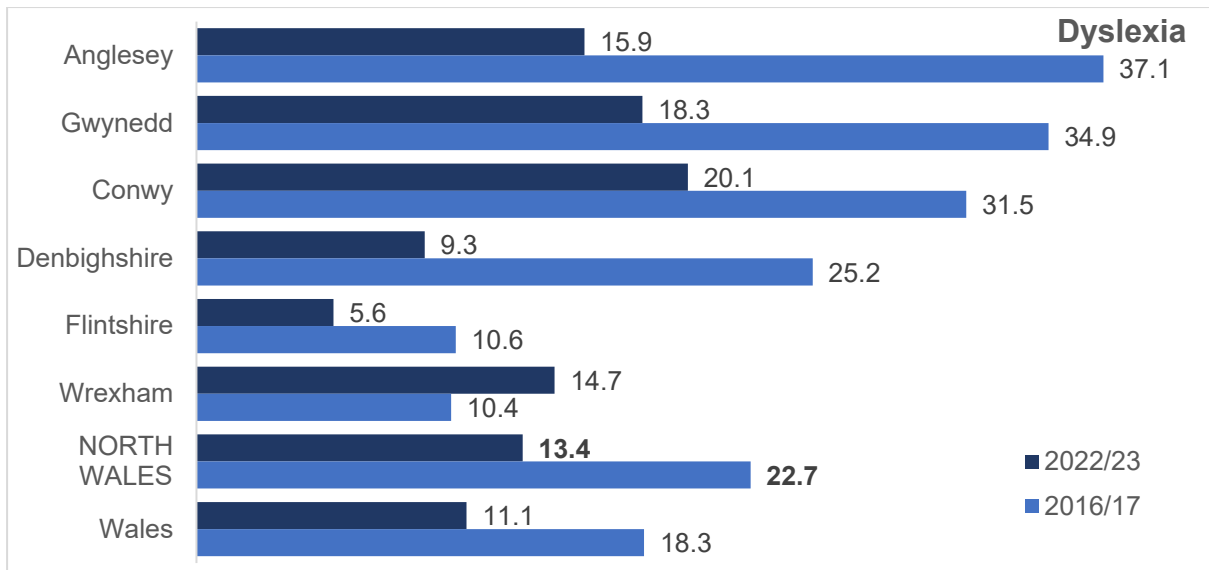
Rate is per 1,000 pupils in maintained schools in the area.

All charts are on the same horizontal scale so they are visually comparable.

Children may have been counted within multiple categories for this data set so the results from the charts should not be added to find a total.

Source: ALN/SEN by type of need, Pupil Level Annual School Census, Welsh Government





There are some caveats to consider when using the Pupil Level Annual School Census data, which may also help to explain the differences across North Wales.

- As it only counts those children who have been statemented, it is likely to be an undercount of the total number of children within the population who have neurodevelopmental conditions.
- The school census is a partial population count. It covers school aged children only (aged 3-18). Even within this population group, data for some age groups is less complete, as children start or leave formal schooling.
- Not all children are included in the school census. It only captures information from local authority schools and does not count pupils at independent or private schools, nor those who are home schooled.
- It counts children where they are educated rather than where they live. The data for any area will not capture information about those who travel to schools in neighbouring authorities, for example. And it will pick up some children who live outside the local authority area but are educated in one of its schools.

The last point in this list is particularly worth consideration when looking at the differences across the region. Schools that provide specialist support for neurodiverse children or have a more proactive statementing process may attract pupils who live outside the area, for example. This could lead to both an increase in numbers and rates in areas where these schools are located, and a corresponding decrease in the pupil's home area.

## Disability Living Allowance benefits data

Figures 8a and 8b: main disabling condition of children aged 0-15 in North Wales who claim Disability Living Allowance, May 2023

Area	Learning difficulties number	Behavioural disorder number	Hyperkinetic syndrome number	Total number	All claimants
Anglesey	250	120	40	420	600
Gwynedd	370	190	60	610	860
Conwy	570	330	90	990	1,260
Denbighshire	510	340	130	980	1,230
Flintshire	590	390	250	1,230	1,610
Wrexham	550	450	260	1,260	1,670
North Wales	2,840	1,820	820	5,490	7,230

Area	Learning difficulties percent	Behavioural disorder percent	Hyperkinetic syndrome percent	Total percent	All claimants
Anglesey	42.2%	20.7%	6.5%	69.3%	600
Gwynedd	42.9%	22.0%	6.4%	71.3%	860
Conwy	45.4%	26.4%	7.1%	78.9%	1,260
Denbighshire	41.4%	27.2%	10.6%	79.3%	1,230
Flintshire	36.4%	24.2%	15.6%	76.1%	1,610
Wrexham	33.1%	27.2%	15.3%	75.7%	1,670
North Wales	39.3%	25.2%	11.4%	75.9%	7,230

Numbers have been rounded so may not sum to total.

Percentage is of all children aged 0-15 claiming Disability Living Allowance benefits.

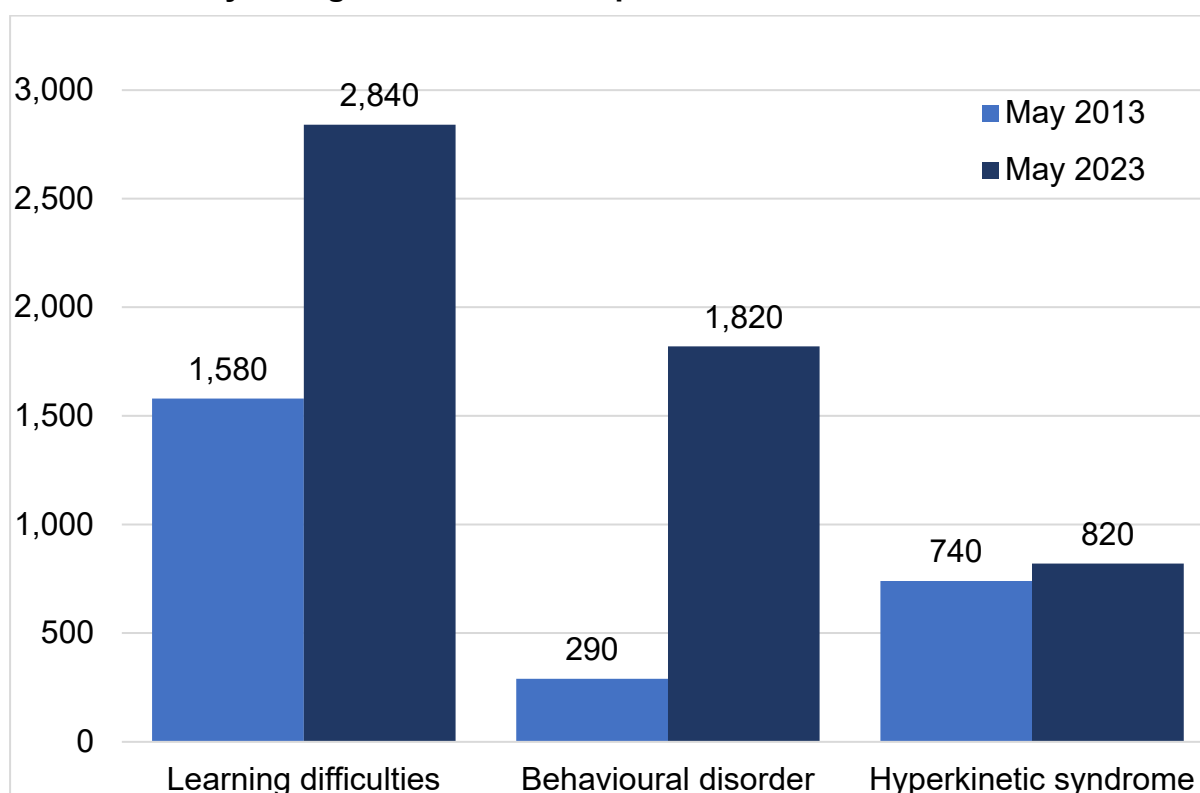
Source: Disability Living Allowance cases in entitlement, Stat-Xplore, Department of Works and Pensions

Disability Living Allowance (DLA) benefits data can also give us an insight into the number of neurodiverse children and young people within our population. This data is for all children aged 0-15 who are claiming Disability Living Allowance benefits, so is not directly comparable to data in previous sections which looks at different age groups. However, it is useful to give us a broader understanding of the data we have about neurodiversity in North Wales.

Statistics on child claimants of Disability Living Allowance show an increase in the numbers of claimants across all North Wales local authorities in the last decade. This is despite a fall in the number of children in the population in the same period.

In May 2023 most of the child Disability Living Allowance caseload in North Wales had one of three main disabling conditions – learning difficulties (39% of the caseload), behavioural disorders (25%) and hyperkinetic syndrome (11%). Though not exclusively so – and not to the exclusion of other conditions – these are the categories most likely to be used to classify neurodiverse children who receive Disability Living Allowance benefits.

**Figure 9: main disabling condition for children aged 0-15 in North Wales who claim Disability Living Allowance – comparison of numbers for 2013 and 2023**



Numbers have been rounded so may not sum to total.

Source: Disability Living Allowance cases in entitlement, Stat-Xplore, Department of Works and Pensions

These categories accounted for 76% of claimants in North Wales in May 2023 or 5,490 children in total, which had increased from 61% or 2,520 children in May 2013. Most of the increase came from the behavioural disorders category, which

accounted for more than five times as many children in 2023 as it had 10 years previously (1,820 cases in 2023 compared to 290 in 2013).

The significant growth in the behavioural disorder and learning difficulties categories in the ten years between May 2013 and May 2023 may be due to a number of factors other than a straightforward growth in the occurrence of these conditions – for example an increase in diagnoses due to increased awareness in medical and care staff; an increase in children with these conditions living in community settings rather than in medical or care establishments; or an increase in families and carers seeking help for children with these conditions. More work may be needed to understand these changes.

## **Predictions for the future**

Data about future trends has not yet been updated in line with new data from the 2021 Census. There will be significant revisions of population bases, population projections, and all rates and propensities that are calculated against these populations. This means the predictions we have previously used about the change in the numbers of neurodiverse children over the next 20 years are now unreliable.

Nevertheless, ahead of official Welsh Government projections being produced (due in summer 2025) we can make some assumptions about future trends from the data we have already looked at. These are that the number of children in the population will continue to decrease in the next decade; that the number of neurodiverse children in the population overall is also likely to decrease.

However, this does not mean the number of children requiring support for neurodevelopmental conditions will decrease in the same period. Recent trends suggest the number of children who are diagnosed and seeking support may continue to rise in the short to medium term due to increasing awareness and willingness to ask for help, though we need better understanding of the drivers of increases in the past decade to make a longer term prediction. It is also possible that the accepted prevalence rates – particularly for autism and ADHD – will be revised upwards in the future, as understanding of the conditions improves.

## Appendix: neurodiversity statistics for primary care clusters

Note: The population base used for primary care clusters in this appendix (2021 Census of Population) is different to that used in the main body of the report. This is because the latest available data – 2022 mid-year estimate population estimates – are not yet available below unitary authority level. This means there may be some differences between the numbers derived from adding the primary care clusters to get a North Wales total and the totals presented in the tables in the main report.

**Figure 10: number of people aged 0-17 in North Wales primary care clusters**

Area	2021 number	2021 percent	2011 number	2011 percent	Change 2011-21
Anglesey	12,700	19.3%	12,950	19.5%	-200
Arfon	12,000	19.4%	12,550	20.0%	-550
Central & South Denbighshire	8,150	19.1%	8,800	20.5%	-650
Conwy East	10,200	18.8%	10,550	19.5%	-350
Conwy West	10,250	17.5%	11,000	18.6%	-750
North East Flintshire	11,600	20.7%	12,250	22.2%	-650
Dwyfor & North Meirionnydd	7,350	18.3%	8,350	19.6%	-1,000
North West Flintshire	7,400	20.4%	7,800	22.1%	-450
South Meirionnydd	3,100	16.6%	3,500	17.5%	-350
South Flintshire	11,000	19.4%	11,450	20.6%	-450
North Denbighshire	11,750	20.5%	11,700	21.2%	100
South Wrexham	9,950	20.4%	10,850	21.9%	-900
North & West Wrexham	6,550	20.1%	7,050	21.3%	-500
Central Wrexham	12,050	20.9%	11,850	21.1%	200
<b>North Wales</b>	<b>162,000</b>	<b>19.5%</b>	<b>140,500</b>	<b>20.4%</b>	<b>-6,550</b>

Numbers have been rounded so may not sum to total.

Percentage is of the total population of the area.

Source: 2021 and 2011 Censuses of Population, Office for National Statistics



**Figure 11: estimate of children aged 0-17 with autism spectrum disorders in North Wales primary care clusters**

Area	2021 boys	2021 girls	2021 all children	2011 all children	Change 2011-21
Anglesey	180	40	220	230	0
Arfon	170	40	210	220	-10
Central & South Denbighshire	120	30	140	150	-10
Conwy East	150	30	180	190	-10
Conwy West	150	30	180	190	-10
North East Flintshire	170	40	210	210	-10
Dwyfor & North Meirionnydd	100	20	130	140	-20
North West Flintshire	100	20	130	140	-10
South Meirionnydd	40	10	50	60	-10
South Flintshire	160	30	190	200	-10
North Denbighshire	170	40	210	210	0
South Wrexham	140	30	170	190	-20
North & West Wrexham	90	20	120	120	-10
Central Wrexham	170	40	210	210	0
<b>North Wales</b>	<b>1,930</b>	<b>420</b>	<b>2,350</b>	<b>2,470</b>	<b>-120</b>
<b>Wales</b>	<b>8,870</b>	<b>1,960</b>	<b>10,820</b>	<b>11,110</b>	<b>-290</b>

Numbers have been rounded so may not sum to total.

Prevalence rates have been applied to census population estimates differentially for boys (2.8%) and girls (0.65%) for each year.

Sources: 2021 and 2011 Censuses of Population, Office for National Statistics; Roman-Urrestarazu, R et al. Association of Race/Ethnicity and Social Disadvantage with Autism Prevalence in 7 Million School Children in England. JAMA Pediatrics; 29 March 2021

**Figure 12: estimate of people aged 0-17 with attention deficit hyperactivity disorder disorders in North Wales primary care clusters, 2021**

Area	Lower estimate	Upper estimate
Anglesey	640	1,270
Arfon	600	1,200
Central & South Denbighshire	410	810
Conwy East	510	1,020
Conwy West	510	1,030
North East Flintshire	580	1,160
Dwyfor & North Meirionnydd	370	730
North West Flintshire	370	740
South Meirionnydd	160	310
South Flintshire	550	1,100
North Denbighshire	590	1,180
South Wrexham	500	990
North & West Wrexham	330	650
Central Wrexham	600	1,210
<b>North Wales</b>	<b>6,700</b>	<b>13,400</b>
<b>Wales</b>	<b>30,880</b>	<b>61,760</b>

Numbers have been rounded so may not sum to total.

The lower estimate uses a prevalence rate of 5% and the upper estimate uses a prevalence rate of 10% applied to the population estimate for that age group.

Sources: 2021 and 2011 Censuses of Population, Office for National Statistics; BMJ Best Practice (2022) Attention deficit hyperactivity disorder in children. BMJ Publishing Group.