

# Children in need census matched to the national pupil database

Methodology document for 2014 to 2015 census

March 2016

# Contents

Data sources	3
Children in need census	3
National pupil database	3
External matching process	4
Internal matching process	5
Children in need population	5
Removing looked after children	5
Duplicate records in the NPD extract	6
Data quality	7
Analysis	8
Changes to the tables this year	12
Related publications	13
Looked after children	13
All children	13

#### **Data sources**

#### Children in need census

The children in need (CIN) census collects information at child level on:

- any child referred to children's social care services within the year; and
- any cases open at the beginning of the year for whom local authorities were providing a service

The collection of the data from each local authority allows the local and national level calculation of information on the numbers of referrals and assessments carried out by children's social care services, along with the identification of the number of children assessed to be in need and the numbers who were the subject of a child protection plan.

## National pupil database

The national pupil database (NPD) is a longitudinal database linking pupil/student characteristics to school and college learning aims and achievement information for all children in state-funded schools in England. Further information on the NPD, including a user guide, can be found <a href="here">here</a>. Information on requesting NPD extracts can be found here.

The CIN census has been matched to the NPD to understand characteristics, attainment and absence of children in need. This is the sixth year the CIN census has been matched to the NPD. For years prior to 2011 to 2012, analysis has been shared with local authorities but not published due to data quality concerns. Due to improved data quality, this is the fourth year DfE has published this analysis.

Looked after children have been removed from the analysis to align with measures included in the children's safeguarding performance information framework. Further detail on the removal of looked after children can be found on page 5.

The analysis contained in the additional outcomes tables includes local authority and national level information on:

- matching rates between the CIN census and the NPD
- prevalence of special educational needs (SEN) and free school meals (FSM)
- attainment at key stage 2, key stage 4 and progression between these key stages
- absence and exclusion rates
- absence rates for children in need who were also the subject of a child protection plan

## **External matching process**

The matching of the CIN census to the NPD is managed by an external contractor. The main matching key is the child's unique pupil number (UPN). A UPN is automatically allocated to each child in maintained schools in England and Wales. It is an identifier only for use in an educational context during a child's school career. Local authorities are asked to return UPNs as part of the CIN census.

A record from the CIN census is matched into the NPD if there is enough identifiable or characteristic information (mainly UPN, but also gender and date of birth) available in that record which either:

- a) identifies the child as already being in the NPD via its appearance in other data sources (which includes the school census and the early years census and previous CIN-NPD datasets) and from which the existing pupil ID can then be attributed to the new record from the 2014 to 2015 CIN census, or
- b) involves creating a new pupil ID for the child when the child's characteristics cannot be accurately determined as currently existing in the NPD

Hence, even though a record from the CIN census has been matched into the NPD (i.e. given a pupil ID), it does not necessarily mean that it can be linked to other data in the NPD if there is no other information attributed to that pupil ID from other data sources. This is particularly relevant for the CIN census as a new child can appear, and therefore be matched into the NPD for the first time, before they start school if enough characteristic information is available in their CIN record to create a new pupil ID.

# **Internal matching process**

The matching between the CIN census and the NPD was carried out using the CIN files submitted by local authorities in summer 2015. However, these files do not indicate whether the children included are 'in need'. The children in need population is subsequently calculated by DfE for the statistical first release (SFR) which was published in October 2015. Therefore once the NPD was matched to CIN census files, DfE subsequently added an 'in need' indicator to this matched file. This 'in need' indicator excludes cases where:

- a. The referral is flagged as being a referral resulting in no further action in 2014 to 2015;
- b. The only activity recorded was an assessment and the reason for the closure of the case being that the case was closed after assessment with no further action.

## Children in need population

There were 391,000 children in need on the child-level CIN census file with open cases at 31 March 2015, but this reduced to 390,100 children in need when duplicates (which were identified as errors when the CIN census data was submitted, but approved by local authorities) were removed from the file.

## Removing looked after children

Indicators N1, N2 and N3 of the children's safeguarding performance information framework cover the educational attainment, absence and exclusions of children in need. Comparable data is published for looked after children, therefore they were excluded from this analysis to focus on other children in need.

The CIN census was matched to the children looked after (CLA) return (also known as SSDA903) using the local authority child ID. This is an ID assigned by the local authority for each child which is unique within that local authority and it should be retained from year to year. Local authorities use the same child IDs for the CIN and CLA returns which allows these datasets to be linked. Children who were looked after at any point during the year were removed from the children in need dataset; however the following groups of children were retained:

- children who received only respite care during the year (these are not included in the looked after children education statistics).
- looked after children who were also the subject of a child protection plan

The removal of looked after children reduced the children in need dataset from 390,100 to 319,700.

## **Duplicate records in the NPD extract**

There were a very small number of duplicate records in the NPD where the same child was listed as taking key stage 4 examinations in different schools. In order to analyse the attainment of children in need at key stage 4, only one record could be used. A variable on the NPD identifies whether the record was included in the school's results in the performance tables. Cases which were included in the performance tables were selected. In the very small number of cases where all duplicate records were used in a school's results, the record with the highest attainment was selected.

The children in need dataset which had looked after children removed was then matched to the NPD extract. This allowed the characteristics, attainment and absence of children in need to be analysed.

# **Data quality**

Overall, 87.9% of school age children in need matched to the NPD. There is much variation in matching rates at local authority level, from 11.1% to 100% (see table L1). The CIN census was matched to the CLA return to remove looked after children from the children in need cohort. The matching rate was 95% and again there was much variation between local authorities, from 32% to 100%. CLA information did not match to the CIN census for two local authorities, likely due to their management information systems assigning different IDs. For these two local authorities and other local authorities where the matching rate between the CIN census and the CLA return was low, there are likely to be looked after children in the children in need cohort for those local authorities. These local authorities are footnoted in table L1.

# **Analysis**

The analysis used the number of school age (5 to 16 inclusive) children in need at 31 March 2015, with the exception of exclusions data which used the number of school age children in need at 1 April 2014. Exclusions information runs to a much later timetable than other information from the NPD (due to the exclusions review process). Therefore exclusions information for the 2013 to 2014 academic year was matched to the 2014 to 2015 CIN census. All children aged 5 to 16 years who were in need at 1 April 2014 were identified and exclusions information was provided for the previous year for this cohort.

National figures have been rounded to the nearest 100. Percentages have been derived from unrounded numerators and denominators, but have been rounded to one decimal place in the tables. Values between 1 and 5 inclusive have been suppressed and replaced with x. Some secondary suppression may have taken place, where necessary, to protect confidentiality.

The following table provides definitions for the numerators and denominators used to calculate the percentages in the tables.

Numerator(s)	Denominator	Percentage	
Table L1: Matching rates			
Number of school age	Number of school age	Percentage of school age	
children in need at 31	children in need in the CIN	children in need matched to	
March 2015 in the	census at 31 March 2015	the NPD	
matched CIN-NPD dataset			
Table L2: Special educational needs (SEN)			
Number of school age	Number of school age	Percentage of school age	
children in need at 31	children in need at 31	children in need at 31 March	
March 2015 in the	March 2015 in the	2015 in the matched CIN-	
matched CIN-NPD dataset	matched CIN-NPD dataset	NPD dataset with:	
with:	with SEN information	-no identified SEN	
-no identified SEN		-SEN support	
-SEN support		-SEN with a statement or	
-SEN with a statement or		EHC plan	
EHC plan			
Table L3: Free school meals (FSM) eligibility			
Number of school age	Number of school age	Percentage of school age	
children in need at 31	children in need at 31	children in need at 31 March	
March 2015 in the	March 2015 in the	2015 who were eligible for	
matched CIN-NPD dataset	matched CIN-NPD dataset	FSM	
and eligible for FSM	with FSM information		

Numerator(s)	Denominator	Percentage		
Table L4: Key stage 2 (KS2	Table L4: Key stage 2 (KS2) attainment			
Number of school age	Number of school age	Percentage of school age		
children in need at 31	children in need at 31	children in need at 31 March		
March 2015 in the	March 2015 in the	2015 in the matched CIN-		
matched CIN-NPD dataset	matched CIN-NPD dataset	NPD dataset achieving level		
achieving level 4 or above	with KS2 information	4 or above in KS2:		
in KS2:		-Reading		
-Reading		-Writing (teacher		
-Writing (teacher		assessment)		
assessment)		-Mathematics		
-Mathematics		-Reading, writing and		
-Reading, writing and		mathematics		
mathematics		-Grammar, punctuation and		
-Grammar, punctuation		spelling		
and spelling				
Table L5: Key stage 4 (KS4	•			
Number of school age	Number of school age	Percentage of school age		
children in need at 31	children in need at 31	children in need at 31 March		
March 2015 in the	March 2015 in the	2015 in the matched CIN-		
matched CIN-NPD dataset	matched CIN-NPD dataset	NPD dataset achieving:		
achieving:	with KS4 information	-Any KS4 pass		
-Any KS4 pass		-5 A*-G grades		
-5 A*-G grades		-5 A*-G grades (inc English		
-5 A*-G grades (inc		and mathematics)		
English and mathematics)		-5 A*-C grades		
-5 A*-C grades		-5 A*-C grades (inc English		
-5 A*-C grades (inc English		and mathematics)		
and mathematics)				

Numerator(s)	Denominator	Percentage	
Table L6: Progression between key stage 2 (KS2) and key stage 4 (KS4) <sup>1</sup>			
Number of school age children in need at 31 March 2015 in the matched CIN-NPD dataset, achieving:	Number of school age children in need at 31 March 2015 in the CIN-NPD dataset with KS2 and KS4 information in:	Percentage of school age children in need at 31 March 2015 in the matched CIN-NPD dataset, between KS2 and KS4 achieving:	
-two levels of progress in English -two levels of progress in mathematics	-English -Mathematics	-two levels of progress in English -two levels of progress in mathematics	
Table L7: Absence from so	Table L7: Absence from school in the autumn and spring term 2014/15		
unauthorised / authorised	/ overall absence levels		
Number of sessions of: -unauthorised absence -authorised absence -overall absence for school age children in need at 31 March 2015 in the matched CIN-NPD dataset, during the autumn and spring terms of 2014/15  Persistent absence level <sup>2</sup>	Total number of sessions for school age children in need at 31 March 2015 in the matched CIN-NPD dataset, with absence information in a primary, secondary or special school in January 2015, during the autumn and spring terms of 2014/15	Absence rates for school age children in need at 31 March 2015 for: -unauthorised absence -authorised absence -overall absence	
	Number of school age	Percentage of school age	
Number of school age children in need at 31 March 2015 in the matched CIN-NPD dataset who were persistent absentees	Number of school age children in need at 31 March 2015 in the matched CIN-NPD dataset with absence information in a primary, secondary or special school in January 2015	Percentage of school age children in need at 31 March 2015 in the matched CIN-NPD dataset who were persistent absentees	

<sup>&</sup>lt;sup>1</sup> A full explanation of how expected progress is calculated is included in the <u>2014 to 2015 GCSE and equivalent results provisional</u> publication.

<sup>&</sup>lt;sup>2</sup> Persistent absentees are defined as having an overall absence rate of around 15 per cent or more. This equates to 56 or more sessions of absence (authorised and unauthorised) during the year for pupils aged between 5 and 14 and 46 or more sessions of absence (authorised and unauthorised) during the year for pupils aged 15.

Numerator(s)	Denominator	Percentage
Table L8: Exclusions in 20	13/14	
Number of school age children in need at 1 April 2014 in the matched CIN-NPD dataset by: -number with at least one fixed period exclusion -number with a permanent exclusion	Number of school age children in need at 1 April 2014 in the matched CIN-NPD dataset, with exclusions information in a primary, secondary or special school in January 2015	Percentage of school age children in need at 1 April 2014 in the matched CIN-NPD dataset with: -at least one fixed period exclusion -permanent exclusions
Table L9: Child protection	plans	
unauthorised / authorised	/ overall absence levels	
Number of sessions of: -unauthorised absence -authorised absence -overall absence for school age children in need at 31 March 2015 who were also the subject of a child protection plan in 2014-15 in the matched CIN-NPD dataset, during the autumn and spring terms of 2014/15	Total number of sessions for school age children in need at 31 March 2015 who were also the subject of a child protection plan in 2014-15 in the matched CIN-NPD dataset, with absence information in a primary, secondary or special school in January 2015, during the autumn and spring terms of 2014/15	Absence rates for school age children in need at 31 March 2015 who were the subject of a child protection plan in 2014-15 for: -unauthorised absence -authorised absence -overall absence
Persistent absence levels		
Number of school age children in need at 31 March 2015 in the matched CIN-NPD dataset who were also the subject of a child protection plan in 2014-15, who were persistent absentees	Number of school age children in need at 31 March 2015 in the matched CIN-NPD dataset who were also the subject of a child protection plan in 2014-15, with absence information in a primary, secondary or special school in January 2015	Percentage of children in need at 31 March 2015 in the matched CIN-NPD dataset who were the subject of a child protection plan, who were persistent absentees

\_

<sup>&</sup>lt;sup>3</sup> Persistent absentees are defined as having an overall absence rate of around 15 per cent or more. This equates to 56 or more sessions of absence (authorised and unauthorised) during the year for pupils aged between 5 and 14 and 46 or more sessions of absence (authorised and unauthorised) during the year for pupils aged 15.

# Changes to the tables this year

Previously, the children in need outcome tables have been published in February and the attainment figures have been based on provisional key stage 2 and key stage 4 data, and the absence figures were based on 2-term absence rates. This year the tables were published in March in order to align the versions of attainment and absence data with those used in the <u>outcomes for children looked after SFR</u>. Provisional figures and 2-term absence rates have still also been included in the tables this year since there is a break in the time series.

# **Related publications**

#### Looked after children

<u>Outcomes for children looked after</u> includes educational attainment, special educational needs (SEN), and absence and exclusions from school. Data is published at national and local authority level on the outcomes for children who have been looked after continuously for at least 12 months at 31 March 2015.

#### All children

<u>Special educational needs in England: January 2015</u> reports on children with SEN and free school meal eligibility.

Revised key stage 2 results for 2014 to 2015 academic year can be found in <u>revised</u> national curriculum assessments at key stage 2 in England.

Attainment of pupils at key stage 4 along with progression between key stages 2 and 4 can be found in <u>revised GCSE and equivalent results 2014 to 2015</u>.

<u>Statistics: pupil absence</u> shows releases reporting levels of overall, authorised and unauthorised absence by school type and reason, with summary statistics on persistent absentees for both 2 term (autumn and spring) and full year absence.

Information about exclusions from school can be found in <u>permanent and fixed period</u> exclusions from schools in England: 2013 to 2014 academic year.



#### © Crown copyright 2016

This publication (not including logos) is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

#### To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3

email <u>psi@nationalarchives.gsi.gov.uk</u>

write to Information Policy Team, The National Archives, Kew, London, TW9 4DU

#### About this publication:

enquiries <u>www.education.gov.uk/contactus</u> download <u>www.gov.uk/government/publications</u>

Reference: DFE-00092-2016



Follow us on Twitter: @educationgovuk



Like us on Facebook:

facebook.com/educationgovuk