



Harmonised indicators of self-reported asthma in five British cohort studies

User Guide (Version 1)

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Centre for Longitudinal Studies

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This project brings together data from five British cohorts: the Medical Research Council (MRC) National Survey of Health and Development (NSHD), the 1958 National Child Development Survey (NCDS), the 1970 British Cohort Study (BCS), Next Steps (formerly the Longitudinal Study of Young People in England), and the Millennium Cohort Study (MCS). NSHD is funded by the MRC and is hosted by the MRC Unit for Lifelong Health and Ageing at UCL. NCDS, BCS, Next Steps, and MCS receive core funding from the ESRC and are hosted by the Centre for Longitudinal Studies at UCL. The most recent sweep of BCS, at age 46, received additional funding from the MRC and the British Heart Foundation.

The authors would like to thank the owners of the five studies included in this report, and the cohort members and their families who have given their time to take part in these studies. We would also like to acknowledge the UK Data Service for providing access to NCDS, BCS, Next Steps, and MCS.

1. Introduction

The British cohort studies collect information on health conditions and diagnoses from self-reports at interviews and on questionnaires. Researchers may be interested in variables which indicate presence of a health condition for a number of reasons. They may be interested in a health condition as an outcome in analyses, as an independent variable in analyses, as a confounder, or to exclude participants with existing health conditions from analyses.

Although the number of events consistently appearing in all British cohort studies may be relatively small for some conditions, there are adequate numbers to investigate some common conditions.

Combining data from multiple longitudinal studies can be used to increase the power of analyses on a particular health condition, and multiple cohorts can be used to compare health across generations. In order to do this appropriately, careful consideration of how comparable the health measures are within studies over time and between studies is required (Bann et al., 2022). In this report we describe the process of harmonising one such condition – asthma.

1.1 Aims

To document all self-reported measures related to asthma in five British cohort studies, and to produce harmonised indicators of self-reported asthma.

1.2 Cohorts included

This resource considers information on self-reported asthma in the following five studies: the MRC National Survey of Health and Development (NSHD), the 1958 National Child Development Study (NCDS), the 1970 British Cohort Study (BCS), Next Steps, and the Millennium Cohort Study.

The MRC National Survey of Health and Development. The MRC NSHD is Britain's longest running birth cohort study. It originally consisted of a social stratified sample (N=5,362) of singleton births to married parents in England, Scotland, and

Wales in March 1946. The sample was selected from an initial maternity survey of 13,637 pregnancies and consisted of all births to fathers in non-manual and agricultural occupations, and a random 1-in-4 sample of births to fathers in manual occupations. To date, the participants have been followed 29 times between ages 2 and 77 years, including three COVID-19 surveys in 2020 and 2021. More information is available on the [MRC LHA website](#).

The 1958 National Child Development Study. The NCDS follows the lives of 17,415 people born in England, Scotland, or Wales in a single week in 1958. The NCDS began in 1958 with the Perinatal Mortality Survey, which captured 98% of the total births in Great Britain in the target week. The cohort has been followed a total of 10 times between ages 7 and 55 years, and data on cohort members in their early 60s is forthcoming. More information is available on the [CLS website](#).

The 1970 British Cohort Study. BCS follows the lives of 17,198 people born in England, Scotland, and Wales in a single week of 1970. BCS began as the British Births Survey, and participants have since been followed up 10 times to date, spanning ages 5 to 51 years. More information is available on the [CLS website](#).

Next Steps. Next Steps (formerly known as the Longitudinal Study of Young People in England) follows a sample of over 16,000 people born in 1989/90. Cohort members were recruited through schools in England when they were aged 13-14 years in 2004. They were interviewed annually between ages 14 and 20 years, at age 25 years, in three COVID-19 Survey sweeps in 2020 and 2021, and at age 32 years. More information is available on the [CLS website](#).

The Millennium Cohort Study. MCS follows the lives of 19,517 children born in England, Scotland, Wales, and Northern Ireland in 2000-2002. Since the initial birth survey at 9 months, there have been six more follow-up surveys at ages 3, 5, 7, 11, 14, and 17 years, as well as an additional three COVID-19 survey sweeps. Data collection for the age 23 sweep is ongoing. More information is available on the [CLS website](#).

1.3 Data used for harmonisation

For the harmonised indicators of asthma across the cohorts, we have used safeguarded data for NCDS, BCS, Next Steps and MCS, which are freely available from the UK Data Service (UKDS), subject to the UKDS End User Licence. NSHD data were obtained through [Skylark](#).

This includes mostly self-reported information. We additionally include some measures derived from doctors' reports which leverage information from parents' reports and medical records. Biomarkers and linked health data were not included.

We focus on measures that were administered to entire cohorts only (i.e., only information from questionnaires aimed at the entire cohort were considered). We focus only on information on asthma status of cohort members themselves (not their parents).

All datasets used in the harmonisation project are listed in appendix 1.

2. Retrospective Harmonisation Approach

Retrospective harmonisation is a term used to describe the process of manipulating data within or across existing studies with the aim of making them more comparable. While each harmonisation project is unique, and decisions must be made on a case-by-case basis depending on the data in question, there are broad methodological guidelines available for harmonisation (Fortier *et al.*, 2017), which we have aimed to follow.

2.1 Documentation of all asthma questions

The first stage of the harmonisation process involved examining all questionnaires administered to whole cohorts across the five cohort studies. For each questionnaire, we documented all questions on asthma, and questions on chronic health conditions for which it would be possible to report asthma in some way (usually in the form of International Classification of Diseases (ICD) codes). Specific attention was paid to the order and routing of questions. Other self-reported questions related to asthma include variables such as age at first diagnosis, medication and visits to the doctor. All available questions related to asthma can be found in these general variable overviews (<https://github.com/CLS-Data/Harmonised-asthma-across-cohorts>).

All variables used in the derivation of the harmonised asthma variables are listed in appendix 2.

2.2 Creation of harmonised indicator variables for asthma

2.2.1 Sweep-specific indicators

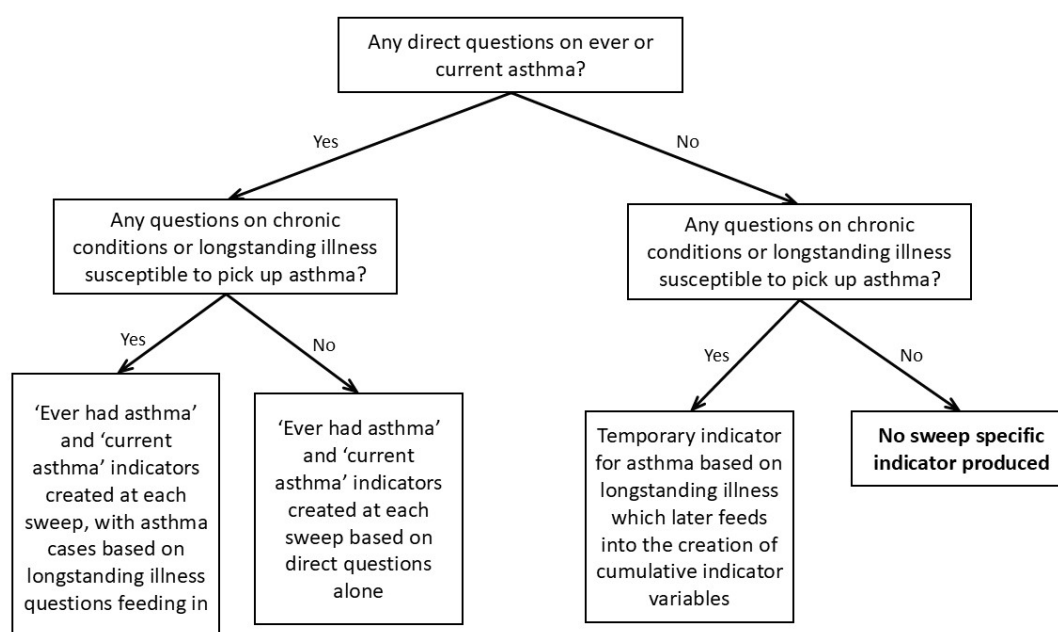
Three main types of question related to asthma were identified to be consistently available across different sweeps and across all cohorts and therefore most suitable to feed into the creation of harmonised indicator variables. They capture either lifetime ('ever') prevalence or point ('current') prevalence.

- Direct questions about lifetime prevalence of asthma. These questions ask whether the cohort member has ever had asthma, or whether they have had asthma since the previous sweep (in which case these responses can be combined with those from previous sweeps to derive lifetime prevalence).
- Direct questions about point prevalence of asthma. These questions ask cohort members if they currently have asthma at the time of the sweep, or in the last 12 months.
- Other questions susceptible to provide indirect evidence on point prevalence of asthma. These include questions about any longstanding illnesses where a cohort member reports a condition which is then coded using the International Classification of Diseases (ICD).

Information from questions which asked directly about whether the participant had asthma were prioritised. Questions on longstanding illness and other questions likely to pick up reports of chronic conditions were used to feed into the within-sweep indicator variables created based on these direct questions. If such direct questions were not available in a particular sweep, questions on longstanding illness alone were used to create temporary indicator variables which later fed into the creation of cumulative indicator variables (Figure 1). We decided not to include within-sweep indicator variables based on longstanding illness type questions alone in the deposited datafile because the way these questions were asked lead to more selective response rates and thus biased prevalences (e.g. 'Do you have any longstanding illness, disability or infirmity which limits your activities compared with people of your own age? What is it?')

Indicators of prevalence (based on whether ever had or currently have asthma) were derived for each sweep. These variables do not use information from other sweeps (unless questions asked 'since the last wave' and life time prevalence had to be created by combining responses with the previous sweep) and include only those who provided information at each given sweep. Study response files were used to ensure that missing data was coded consistently, to enable differentiation between item and wave non-response.

Figure 1. Questions feeding into sweep-specific indicators of asthma.



For BCS and NCDS questions for asthma were systematically combined with wheezy bronchitis at certain time points (e.g. 'Have you ever had asthma or wheezy bronchitis?' 'Do you currently have asthma or wheezy bronchitis'). Therefore, wherever possible, we attempted to create an additional indicator variable for 'asthma and wheezy bronchitis' grouped together. This applies also to waves where asthma and wheezy bronchitis were reported separately (including for NSHD, NS and MCS at all Covid waves), in which case we created indicator variables for asthma alone, as well as for asthma and wheezy bronchitis grouped together.

Worked example of derivation process at age 23 in NCDS

There are direct questions about asthma prevalence in this sweep, but only grouped together with wheezy bronchitis.

Since your sixteenth birthday have you had an attack of asthma or wheezy bronchitis?

Have you had an attack in the last 12 months?

The first question is used to create an indicator for lifetime prevalence of asthma or wheezy bronchitis (asthmabronc_23_ever). Since the question asks about 'since your sixteenth birthday' information from lifetime prevalence of asthma or wheezy

bronchitis at age 16 feeds into the indicator variable for all those cohort members who have responded to the survey at age 23. Both questions combined are used to create an indicator for current prevalence of asthma and wheezy bronchitis (asthmabronc_23_current).

There are no direct questions on only asthma at this sweep. However, there are three longstanding illness type questions which could indirectly capture point prevalence:

Do you have any longstanding illness, disability or infirmity which limits your activities compared with people of your own age? What is it?

At the present time, do you have any regular medical supervision for any condition other than the ones you have already spoken about? What conditions are you under regular medical supervision for?

Do you have any other medical condition or problem concerning your physical health that has not already been mentioned? What is it?

The first question is about limiting longstanding illness, rather than any longstanding illness. It is likely that many people will not report asthma as a condition which limits their regular activities. Similarly, people might not report asthma as a condition they are under medical supervision for in the second question, or simply forget to report asthma as a physical health problem in the last question. Therefore, prevalences are likely to be much lower compared to questions that ask about asthma directly. The information on asthma from all three questions is combined to produce a temporary sweep-specific indicator of asthma which will only feed into the generation of cumulative indicators at the end, not exist as a standalone indicator variable for asthma alone at this sweep.

Worked example of derivation process at age 10 in BCS

There are direct questions about asthma prevalence and about wheezy bronchitis prevalence in this sweep.

Has the child ever had one or more attacks or bouts in which there was wheezing or whistling in the chest?

What are these thought to be due to? (Asthma)

What are these thought to be due to? (Wheezy bronchitis)

The first two questions were used to create an indicator for lifetime prevalence of asthma (asthma_10_ever). All three questions were used to create an indicator for lifetime prevalence of asthma or wheezy bronchitis grouped together (asthmabronc_10_ever). In addition there are indirect questions on illnesses and conditions.

Have there been any other illnesses or relevant conditions concerning the child's past or present health which have not been described already? If yes, please specify.

Although it is less likely that asthma will be captured here considering asthma is asked about directly as well, one additional case was identified and fed back into the indicators for lifetime prevalence of asthma / asthma or wheezy bronchitis grouped together. Further information exists on when symptoms of asthma or wheezy bronchitis occurred.

Did wheezing occur at any of the following ages?

This information was used to create indicators for current status of asthma (asthma_10_current) as well as of asthma or wheezy bronchitis grouped together (asthmabronc_10_current).

In addition to parent reports on child asthma, the current wave also included doctor reports.

Has the child ever had any of the following conditions? (Asthma)

Has the child ever had any of the following conditions? (Wheezy bronchitis)

Is there any evidence that this child has now or has had in the past any significant illness, developmental problem, defect or handicap? Diagnosis

These were used to create indicators for lifetime prevalence of asthma (asthma_10_everdoc) and asthma or wheezy bronchitis grouped together (asthmabronc_10_everdoc) as well as current asthma (asthma_10_currentdoc) and current asthma or wheezy bronchitis (asthmabronc_10_currentdoc). Cases of asthma identified based on the indirect question on illness, developmental problem etc were fed back into the lifetime prevalence indicators.

2.2.2 Cross-sweep indicators

Subsequently, we created cumulative lifetime prevalence indicators for asthma including all sweeps with available information. Multiple cumulative indicator variables were created reflecting whether a cohort member had ever reported asthma up to a certain time point. If cohort members answered 'yes' to an 'ever' or 'current' asthma question or based on their response to a longstanding illness-type question at this or previous waves, the indicator takes a value of 1 (yes). If the respondent had not ever reported asthma up to that point, and we had a report of never asthma at this or subsequent sweeps, the indicator takes a value of 0 (no). A small number of cohort members were left without a determined asthma status at each wave due to item nonresponse. A larger number of cohort members have missing values on the cumulative indicator due to wave nonresponse.

2.2.3 Cross-study harmonisation

The process of cross-study harmonisation included selecting variables related to asthma that were available across all five cohorts and which were worded similar enough to assume they capture the same construct. Furthermore, we created within-sweep and cumulative indicator variables in a way that made them comparable across all five cohorts.

2.2.4 Indicator variables with limited information

In a few cases we created 'have you ever had' indicator variables despite some of the necessary information missing. This only occurred whenever the direct questions about asthma / asthma or wheezy bronchitis at a wave did not ask for 'have you ever had' but instead 'since the last wave, have you had'. In this case we would feed in lifetime prevalence information from the previous wave (as describe above). But occasionally, the previous wave provided no information on lifetime prevalence of asthma / asthma or wheezy bronchitis, because there was either no information about either condition at all, information only based on longstanding illness type questions, or information only about current status of asthma / asthma or wheezy bronchitis. Whenever this happened, the variable label as well as the variable name

of the indicator variable would reflect that the variable is based on limited information. All affected indicator variables are listed and specified below:

For NSHD:

- ‘Have you ever had asthma at age 69’ (asthma_69_ever_ltd): The direct question at age 69 asks ‘since the last wave, have you had asthma’. At the previous wave (age 63), asthma is based only on the longstanding illness type questions, which tends to pick up fewer cases of asthma compared to when asked about the condition directly. We also feed in information on ‘ever had asthma’ from age 53, but it is possible a few cases of asthma did not get picked up between age 53 and 63. The same limitation applies to the cumulative indicator for asthma up to age 69 (asthma_69_cumul_ltd) since it is based on the same information.

For NCDS:

- ‘Have you ever had asthma or wheezy bronchitis at age 53’ (asthmabronc_55_ever_ltd): The direct question at age 53 asks ‘since the last wave, have you had asthma or wheezy bronchitis’. At the previous wave (age 50) we only have information on current asthma and no information of wheezy bronchitis. The latest wave asking for lifetime prevalence of asthma is at age 42, and latest wave asking for lifetime prevalence of asthma or wheezy bronchitis grouped together is at age 23. Both of these were fed in to create this indicator variable, but nonetheless it is likely that a few cases of asthma were not picked up between age 42 and 50, and more cases of wheezy bronchitis were not picked up between age 23 and 50. The same limitation applies to the cumulative indicator variable (asthmabronc_55_cumul_ltd).

For BCS70:

- ‘Have you ever had asthma or wheezy bronchitis at age 34’ (asthmabronc_34_ever_ltd): The direct question at age 34 asks ‘since last wave, have you had asthma or wheezy bronchitis’. At the previous wave (age 30) we only have information on asthma, not on wheezy bronchitis. The latest wave on lifetime prevalence on asthma or wheezy bronchitis grouped together was at age 16, so we fed in that information. It is likely that some cases of

wheezy bronchitis were not picked up between age 16 and 30. The same limitation applies to the cumulative indicator variable (asthmabronc_34_cumul_ltd).

- 'Have you ever had asthma or wheezy bronchitis at age 42' (asthmabronc_42_ever_ltd): Again, it was asked 'since last wave, have you had asthma or wheezy bronchitis'. At the previous wave (age 38) we only have information on current asthma or wheezy bronchitis. The latest wave on lifetime prevalence on asthma or wheezy bronchitis is age 34 which is based on limited information as well (see above). Therefore, it is likely that some cases of asthma were not picked up between age 34 and 38 and some cases of wheezy bronchitis were not picked up between age 16 and 38. The same limitation applies to the cumulative indicator variable (asthmabronc_42_cumul_ltd).
- 'Have you ever had asthma or wheezy bronchitis at age 46' (asthmabronc_46_ever_ltd) and 'Have you ever had asthma or wheezy bronchitis at age 51' (asthmabronc_51_ever_ltd) were also both based on questions asking 'since the the last wave'. Information at the previous waves are always based on limited information (as described above). Therefore, for both variables, it is likely that some cases of asthma were not picked up between age 34 and 38 and some cases of wheezy bronchitis were not picked up between age 16 and 38. The same limitation applies to the cumulative indicator variables (asthmabronc_46_cumul_ltd and asthmabronc_51_cumul_ltd).

3. Description of the Harmonised Datasets

3.1 Licensing and data access

The harmonised data for asthma have been processed by CLS and supplied to the UK Data Service. All data users need to be registered with the UK Data Service and to sign the UKDS End User Licence before they can download the data. Details of how to do this are available at ukdataservice.ac.uk/get-data/how-to-access/registration.

The NCDS, BCS70, Next Steps and MCS datasets are available from the UK Data Service as safeguarded data, which can be downloaded from the UK Data Service once the End User Licence (EUL) access conditions have been accepted by the user.

The NSHD dataset can be accessed by downloading the UKDS Special Licence application form. Once the form has been reviewed by UKDS and approved by the NSHD Data Sharing Committee the data will be available to download. For accessing and linking to other NSHD data see section 3.2.

Access for additional NSHD data

The NSHD asthma dataset is also available from MRC Unit for Lifelong Health and Ageing at UCL (LHA), which manages the NSHD. This route of access is necessary for analysts wishing to use the asthma data alongside other information held for the 1946 cohort. The research project needs to first be approved by the NSHD Data Sharing Committee. Full details on how to access the data can be found here. Once a data access form has been approved and a data sharing agreement is in place, the data can be accessed via www.condor.ucl.ac.uk.

3.2 List of datasets

Datasets are all available in wide format with one row per cohort member.

Table 1: List of available datasets

Name of the dataset	Content summary
harmonised_asthma_nshd	Harmonised indicators of self-reported asthma in the 1946 NSHD. Includes sweep-specific indicators and derived cumulative indicators.
harmonised_asthma_ncds	Harmonised indicators of self-reported asthma in the 1958 NCDS. Includes sweep-specific indicators and derived cumulative indicators.
harmonised_asthma_bcs	Harmonised indicators of self-reported asthma in the 1970 BCS. Includes sweep-specific indicators and derived cumulative indicators.
harmonised_asthma_nextsteps	Harmonised indicators of self-reported asthma in Next Steps. Includes sweep-specific indicators only.
harmonised_asthma_mcs	Harmonised indicators of self-reported asthma in MCS. Includes sweep-specific indicators and derived cumulative indicators.

3.3 Harmonised variables syntax

The code developed to derive all harmonised asthma variables can be found on the CLS Data GitHub page <https://github.com/CLS-Data/Harmonised-asthma-across-cohorts>.

3.4 Identifiers

Individual identifiers

Table 2: List of individual identifiers

Name of the dataset	Individual identifier
harmonised_asthma_nshd	nshdid_ukds01
harmonised_asthma_ncds	ncdsid
harmonised_asthma_bcs	bcsid
harmonised_asthma_nextsteps	nsid
harmonised_asthma_mcs	mcsid (MCS family identifier) and cnum (individual person identifiers).

Use of individual identifiers to merge with cohort study data

For NCDS, BCS70, Next Steps and MCS, the data are identified with the same research IDs used for the rest of cohort data available at the UK Data Service. This enables the data to be merged with one another.

For MCS, researchers need to use both the MCS family identifier (MCSID) and the individual person identifier (CNUM) to merge on with other cohort data.

For NSHD, research IDs differ from the original research IDs and data can therefore not be merged with other NSHD data files. Access to the harmonised variables in connection with other NSHD variables can be requested via usual the NSDH data sharing request as all harmonised asthma variables are also included in the NSDH data catalogue.

3.5 Variable Naming Conventions

Variable naming conventions have been used to indicate to users the primary source of information on asthma.

Sweep-specific indicators

All indicators of presence of asthma at a given sweep are named **asthma_xx_y**, where:

- 'xx' indicates the cohort member's age.
- 'y' indicates the primary source of information on asthma:
 - **'ever'** indicates that the information comes from answers to an 'ever asthma' question, which may further be enriched with responses to longstanding illness questions and other questions at the same sweep.
 - **'current'** indicates that the information comes from answers to a 'current asthma' question, which may further be enriched with responses to longstanding illness questions and other questions at the same sweep.
 - **'doc'** indicates that the information comes from a doctor's review of parent reported asthma status and medical records, as part of the medical exams. These occur in BCS and NCDS before age 16.
 - **'ltd'** is a variable name addition which indicates that the indicator variable is based on limited information (see above for more detailed description).

For BCS and NCDS, all indicators of presence of asthma grouped together with wheezy bronchitis at a given sweep are named **asthmabronc_xx_y** with the same naming conventions for xx and y as above.

Cross-sweep indicators

Cumulative indicators were only derived for NSHD, NCDS, BCS, and MCS since for Next Steps there was no available information of lifetime prevalence on asthma at any available sweeps.

- Cumulative 'ever' indicator variables for asthma are named **asthma_xx_cumul** where xx refers to the age at the sweep up to which the indicator is cumulated.
- Cumulative 'ever' indicators for asthma grouped with wheezy bronchitis are named **asthmabronc_xx_cumul**.

- For a few cases cumulative indicator variables were based on limited information in the sweep-specific indicator variables, which would be reflected in the variable name as **asthmabronc_xx_cumul_ltd**.

3.6 Accessing Intermediate Variables

The deposited dataset only retains the derived harmonised indicators for asthma, however, throughout the process of deriving these indicators we have documented other available self-reported information on asthma across the cohorts (such as variables based on longstanding illness type questions). Researchers who are interested can derive these indicators themselves using the code we have deposited (<https://github.com/CLS-Data/Harmonised-asthma-across-cohorts>).

3.7 Response categories and missing values

For sweep specific indicator variables (e.g. `asthma_34_ever`) response categories and missing values were labelled as follows:

- 1 = Asthma reported in sweep
- 2 = No asthma reported in sweep
- 1 = No information provided
- 9 = Not in sweep.

Similarly, for cross sweep indicator variables (e.g. `asthma_34_cumul`) response categories and missing values were labelled as follows:

- 1 = Asthma ever reported up to and including current sweep
- 2 = No asthma reported up to and including current sweep
- 1 = Not enough information provided
- 9 = Not in sweep

References

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<https://doi.org/10.1093/ije/dyw075>

Appendix 1: Datasets Used for Harmonisation

1946 National Study of Health and Development

All variables for NSHD were requested through Skylark. The variables included in the derivation can be seen in Appendix 2. Users should also request response variables if they plan to derive the harmonised outcomes.

1958 National Child Development Study

All datasets used are available via the UK Data Service to registered users, through an end user license agreement:

- Response file: SN 5560
- Age 0-16: SN 5565
- Age 23: SN 5566
- Age 33: SN 5567
- Age 42: SN 5578
- Age 46: SN 5579
- Age 50: SN 6137
- Age 55: SN 7669
- COVID-19 sweeps: SN 8658.

1970 British Cohort Study

All datasets used are available via the UK Data Service to registered users, through an end user license agreement:

- Response file: SN 5641
- Birth: SN 2666
- Age 5: SN 2699
- Age 10: SN 3723
- Age 16: SN 3535
- Age 26: SN 3833
- Age 30: SN 5558

- Age 34: SN 5585
- Age 38: SN 6557
- Age 42: SN 7473
- Age 46: SN 8547
- COVID-19 sweeps: SN 8658
- Age 51: SN 9347.

Next Steps

All datasets used are available via the UK Data Service to registered users, through an end user license agreement:

- All Next Steps sweeps: SN 5545
- COVID-19 sweeps: SN 8658

Millennium Cohort Study

All datasets used are available via the UK Data Service to registered users, through an end user license agreement:

- Response file: SN 8172
- Birth: SN 4683
- Age 3: SN 5350
- Age 5: SN 5795
- Age 7: SN 6411
- Age 11: SN 7464
- Age 14: SN 8156
- COVID-19 sweeps: SN 8658

Appendix 2: Indicators and Variables Used to Derive Harmonised Measures

1946 MRC National Survey of Health and Development

If you would like to derive these variables yourself, then please note that it is also important to request the following variables from NSHD, to ensure that missingness is coded appropriately across sweeps.

Age	Year	Question	Original name	New name	Coding of new variable
<i>Sweep-specific indicators</i>					
6	1952	Asthma attack during last year	asthd1	asthma_6_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
7	1953	Asthma attack during last year: How frequent?	notd2	asthma_7_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
11	1957	Asthma attack during last year	astmd3	asthma_11_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
15	1961	Has the child during the last year had an attack of asthma	asthd4	asthma_15_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
36	1982	Do you have the following all or most of the time: Asthma	asth82	asthma_36_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
43	1989	Have you ever had any of the following: Asthma	asth89	asthma_43_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
43	1989	Have you ever had any of the following: Asthma How old were you when you had this problem: Last time	asth89 lasth89	asthma_43_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
53	1999	And in the last ten years have you had asthma? (Feed in information from asthma_43_ever.)	asthma	asthma_53_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
69	2014-2016	Since 2006, have you had asthma? (Feed in information from asthma_53_ever.)	asth15	asthma_69_ever_ltd	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
69	2014-2016	Since 2006, have you had asthma? Have you had an asthma attack in the last 12 months?	asth15 asthlyr15	asthma_69_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
74	2020	Do you have any of the following? (Asthma)	CW1_LLI_3	asthma_74_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
74	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3 CW1_LLI_5	asthmabronc_74_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep

Age	Year	Question	Original name	New name	Coding of new variable
					-1 = No information provided -9 = Not in sweep
74	2020	Do you have any of the following? (Asthma)	CW1_LLI_3/CW2_LLI1_3	asthma_74_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
74	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3/CW2_LLI1_3 CW1_LLI_5/CW2_LLI1_5	asthmabronc_74_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
75	2021	Do you have any of the following? (Asthma)	CW3_LLI1_3	asthma_75_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
75	2021	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW3_LLI1_3 CW3_LLI1_5	asthmabronc_75_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
<i>Cross-sweep indicators</i>					
43	-	DERIVED: Ever asthma by age 43 [cumulative]	-	asthma_43_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
53	-	DERIVED: Ever asthma by age 53 [cumulative]	-	asthma_53_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
69	-	DERIVED: Ever asthma by age 69 [cumulative, <i>limited information</i>]	-	asthma_69_cumul_ltd	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

1958 National Child Development Study

Age	Year	Question	Variables included	Indicator name	Coding of new variable
7	1965	Has the child ever had stacks of asthma? <i>Parent report.</i>	n259	asthma_7_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
7	1965	Has the child ever had stacks of asthma? <i>Parent report.</i> Has the child ever had bronchitis with wheezing? <i>Parent report.</i>	n259 n260	asthmabronc_7_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
11	1969	Has child ever had attacks of ...? (Asthma, wheezy bronchitis, neither...). <i>Parent report.</i>	n1305	asthma_11_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
11	1969	Has child ever had attacks of ...? (Asthma, wheezy bronchitis, neither...). <i>Parent report.</i>	n1305	asthmabronc_11_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1974	Has the study child ever had an attack of asthma or wheezy bronchitis? <i>Parent report.</i>	n2617	asthmabronc_16_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep

Age	Year	Question	Variables included	Indicator name	Coding of new variable
16	1974	Has the study child ever had an attack of asthma or wheezy bronchitis? <i>Parent report.</i> Did the most recent attack occur...?	n2617 n2622	asthmabronc_16_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
23	1981	Since your sixteenth birthday have you had an attack of asthma or wheezy bonchitis? <i>(Feed in information from asthmabronc_16_ever)</i> Do you have any longstanding illness, disability or infirmity which limits your activities? What is it? What conditions are you under regular medical supervision for? Do you have any other medical condition or problem concerning your physical or mental health that hasn't already been mentioned? What is it?	n5770 n5740 n6458/n6461 n6464/n6467 n5873 n6558	asthmabronc_23_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
23	1981	Since your sixteenth birthday have you had an attack of asthma or wheezy bonchitis? <i>(Feed in information from asthmabronc_16_ever)</i> Have you had an attack in the last 12 months? Do you have any longstanding illness, disability or infirmity which limits your activities? What is it? What conditions are you under regular medical supervision for? Do you have any other medical condition or problem concerning your physical or mental health that hasn't already been mentioned? What is it?	n5770 n5771 n5740 n6458/n6461 n6464/n6467 n5873 n6558	asthmabronc_23_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
33	1991	Have you ever been told that you have asthma?	n504021	asthma_33_ever	1 = Asthma reported in sweep

Age	Year	Question	Variables included	Indicator name	Coding of new variable
		Including any health problems you may have already told me about do you have any longstanding illness, disability or infirmity of any kind? What is the name of this condition?	n509031/n509034/ n509037/n509040		2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
42	2000	Have you ever had or been told you had...? (Asthma)	hhfbane1/hhfbane2/ hhfbane3/hhfbane4/ hhfbane5	asthma_42_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
42	2000	Have you ever had or been told you had...? (Asthma) Have you had had this problem in the last 12 months?	hhfbane1/hhfbane2/ hhfbane3/hhfbane4/ hhfbane5 cl112m4	asthma_42_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
50	2008	Are you currently suffering from any of the health problems listed on this card? (Asthma or wheezy bronchitis) Do you have any [other] longstanding illness, disability or infirmity? By longstanding I mean anything that has troubled you over a period of time, or that is likely to affect you over a period of time? What is the matter with you?	N8KHPB01/N8XKHP01 N8XLSA01/N8XLSA02/ N8XLSA03/N8XLSA04/ N8XLSA05/N8XLSA06/ N8XLSA07/N8XLSA08/ N8XLSA09/N8XLSA10/ N8XLSA11	asthmabronc_50_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
55	2013	Since [last interview] have you had any of the following conditions or health problems? (Asthma or wheezy bronchitis) <i>(Feed in information from asthmabronc_50_current, asthma_42_ever and asthmabronc_23_ever)</i>	N9KHPB01	asthmabronc_55_ever_ltd	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
62	2020	Do you have any of the following? (Asthma)	CW1_LLI_3	asthma_62_current1	1 = Asthma reported in sweep

Age	Year	Question	Variables included	Indicator name	Coding of new variable
					2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
62	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3 CW1_LLI_5	asthmabronc_62_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
62	2020	Do you have any of the following? (Asthma)	CW1_LLI_3/CW2_LLI1_3	asthma_62_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
62	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3/CW2_LLI1_3 CW1_LLI_5/CW2_LLI1_5	asthmabronc_62_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
63	2021	Do you have any of the following? (Asthma)	CW3_LLI1_3	asthma_63_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
63	2021	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW3_LLI1_3 CW3_LLI1_5	asthmabronc_63_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided

Age	Year	Question	Variables included	Indicator name	Coding of new variable
					-9 = Not in sweep
<i>Cross-sweep indicators</i>					
7	-	DERIVED: Ever asthma by age 7 [cumulative]	-	asthma_7_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
11	-	DERIVED: Ever asthma by age 11 [cumulative]	-	asthma_11_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
16	-	DERIVED: Ever asthma by age 16 [cumulative]	-	asthma_16_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
33	-	DERIVED: Ever asthma by age 33 [cumulative]	-	asthma_33_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

Age	Year	Question	Variables included	Indicator name	Coding of new variable
7	-	DERIVED: Ever asthma or wheezy bronchitis by age 7 [cumulative]	-	asthmabronc_7_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
11	-	DERIVED: Ever asthma or wheezy bronchitis by age 11 [cumulative]	-	asthmabronc_11_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
16	-	DERIVED: Ever asthma or wheezy bronchitis by age 16 [cumulative]	-	asthmabronc_16_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
23	-	DERIVED: Ever asthma or wheezy bronchitis by age 33 [cumulative]	-	asthmabronc_23_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

Age	Year	Question	Variables included	Indicator name	Coding of new variable
55	-	DERIVED: Ever asthma or wheezy bronchitis by age 33 [cumulative, limited information]	-	asthmabronc_55_cumul_ltd	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

1970 British Cohort Study

Age	Year	Question	Original name	New name	Coding of new variable
5	1975	Had [study child] ever had one or more attacks or bouts in which he/she had wheezing on the chest, regardless of the cause? Please describe what the mother was told about the diagnosis in her own words.	e087 e093	asthma_5_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
5	1975	Had [study child] ever had one or more attacks or bouts in which he/she had wheezing on the chest, regardless of the cause? Please describe what the mother was told about the diagnosis in her own words.	e087 e093	asthmabronc_5_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
5	1975	Had [study child] ever had one or more attacks or bouts in which he/she had wheezing on the chest, regardless of the cause? Please describe what the mother was told about the diagnosis in her own words. How many attacks occurred since fourth birthday?	e087 e093 e091	asthma_5_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
5	1975	Had [study child] ever had one or more attacks or bouts in which he/she had wheezing on the chest, regardless of the cause? Please describe what the mother was told about the diagnosis in her own words. How many attacks occurred since fourth birthday?	e087 e093 e091	asthmabronc_5_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
10	1980	Has the child ever had one or more attacks or bouts in which there was wheezing or whistling in the chest? What are these thought to be due to? (Asthma) Have there been any other illnesses or relevant conditions concerning the child's past or present health which have not been described already?	b7_1 b7_2 b19_1	asthma_10_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
		If yes, please specify.	pent1_2 – pent20_2		
10	1980	Has the child ever had one or more attacks or bouts in which there was wheezing or whistling in the chest? What are these thought to be due to? (Asthma) What are these thought to be due to? (Wheezy bronchitis) Have there been any other illnesses or relevant conditions concerning the child's past or present health which have not been described already? If yes, please specify.	b7_1 b7_2 b7_3 b19_1 pent1_2 – pent20_2	asthmabronc_10_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
10	1980	Has the child ever had one or more attacks or bouts in which there was wheezing or whistling in the chest? What are these thought to be due to? (Asthma) Did wheezing occur at any of the following ages?	b7_1 b7_2 b7_9 – b7_12	asthma_10_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
10	1980	Has the child ever had one or more attacks or bouts in which there was wheezing or whistling in the chest? What are these thought to be due to? (Asthma) What are these thought to be due to? (Wheezy bronchitis) Did wheezing occur at any of the following ages?	b7_1 b7_2 b7_3 b7_9 – b7_12	asthmabronc_10_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
10	1980	Has the child ever had any of the following conditions? (Asthma) Is there any evidence that this child has now or has had in the past any significant illness, developmental problem, defect or handicap?: Diagnosis	meb4_26 – meb4_30 mea7_2/mea7_5/ mea7_8/mea7_11/ mea7_14/mea7_17	asthma_10_everdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
10	1980	Has the child ever had any of the following conditions? (Asthma)	meb4_26 – meb4_30	asthma_10_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep

Age	Year	Question	Original name	New name	Coding of new variable
					-1 = No information provided -9 = Not in sweep
10	1980	Has the child ever had any of the following conditions? (Asthma) Has the child ever had any of the following conditions? (Wheezy bronchitis) Is there any evidence that this child has now or has had in the past any significant illness, developmental problem, defect or handicap?: Diagnosis	meb4_26 – meb4_30 meb4.31 - meb4.35 mea7_2/mea7_5/ mea7_8/mea7_11/ mea7_14/mea7_17	asthmabronc_10_everdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
10	1980	Has the child ever had any of the following conditions? (Asthma) Has the child ever had any of the following conditions? (Wheezy bronchitis)	meb4_26 – meb4_30 meb4.31 – meb4.35	asthmabronc_10_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1986	Has the study teenager ever had any attacks of wheezing or whistling in the chest? What were these thought to be due to?	ob9_1 ob9_8 – ob9_10	asthma_16_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1986	Has the study teenager ever had any attacks of wheezing or whistling in the chest? What were these thought to be due to?	ob9_1 ob9_8 – ob9_10	asthmabronc_16_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1986	Has the study teenager ever had any attacks of wheezing or whistling in the chest? What were these thought to be due to? When did the most recent attack occur?	ob9_1 ob9_8 – ob9_10 ob9_18	asthma_16_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided

Age	Year	Question	Original name	New name	Coding of new variable
					-9 = Not in sweep
16	1986	Has the study teenager ever had any attacks of wheezing or whistling in the chest? What were these thought to be due to? When did the most recent attack occur?	ob9_1 ob9_8 – ob9_10 ob9_18	asthmabronc_16_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1986	Has this teenager ever had any of the following conditions? (Asthma)	rc3_6	asthma_16_everdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1986	Has this teenager ever had any of the following conditions? (Asthma)	rc3_6	asthma_16_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1986	Has this teenager ever had any of the following conditions? (Asthma) Has this teenager ever had any of the following conditions? (Wheezy bronchitis)	rc3_6 rc3_7	asthmabronc_16_everdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
16	1986	Has this teenager ever had any of the following conditions? (Asthma) Has this teenager ever had any of the following conditions? (Wheezy bronchitis)	rc3_6 rc3_7	asthmabronc_16_currentdoc	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
26	1996	<p>Since you were 16, have you suffered from this health problem? (Asthma)</p> <p><i>(Feed in information from asthma_16_ever.)</i></p> <p>Do you suffer from any long term health problem, long standing illness, infirmity or disability of any kind?</p> <p>Please describe.</p>	<p>b960448</p> <p>b960566</p> <p>q41oth1 - q41oth6</p>	asthma_26_ever	<p>1 = Asthma reported in sweep</p> <p>2 = No asthma reported in sweep</p> <p>-1 = No information provided</p> <p>-9 = Not in sweep</p>
26	1996	<p>Since you were 16, have you suffered from this health problem? (Asthma)</p> <p><i>(Feed in information from asthma_16_ever.)</i></p> <p>If you have suffered from this health problem since you were 16, was this in the last 12 months? (Asthma)</p>	<p>b960448</p> <p>b960514</p>	asthma_26_current	<p>1 = Asthma reported in sweep</p> <p>2 = No asthma reported in sweep</p> <p>-1 = No information provided</p> <p>-9 = Not in sweep</p>
30	2000	Have you ever had or been told you had... (asthma)	hhfbane1 - hhfbane5	asthma_30_ever	<p>1 = Asthma reported in sweep</p> <p>2 = No asthma reported in sweep</p> <p>-1 = No information provided</p> <p>-9 = Not in sweep</p>
30	2000	<p>Have you ever had or been told you had... (asthma)</p> <p>Have you had asthma in the last 12 months?</p>	hhfbane1 - hhfbane5 cl112m4	asthma_30_current	<p>1 = Asthma reported in sweep</p> <p>2 = No asthma reported in sweep</p> <p>-1 = No information provided</p> <p>-9 = Not in sweep</p>
34	2004	<p>Do you have any longstanding illness, disability or infirmity?</p> <p>What is the matter with you?</p>	<p>b7lsiany</p> <p>b7xlsa - b7xlse/ b7xlsa2 - b7xlsd2/ b7xlsa3 - b7xlsc3/ b7xlsa4 - b7xlsb4/ b7xlsa5 - b7xlsb5/ b7xlsa6 - b7xlsb6/ b7xlsa7</p> <p>b7khp1</p>	asthma_34_l	

Age	Year	Question	Original name	New name	Coding of new variable
		(Other than the problems you have mentioned) do you have any other health problems or difficulties? What health problems?	b7xkhlba - b7xkhlbd		
34	2004	[Including problems you have already told me about] since [date of last interview/January 2000] have you had any of the health problems listed on this card? Please include any health problems that had already started before that date. (Asthma or wheezy bronchitis) <i>(Feed in information from asthma_30_ever and asthmabronc_16_ever.)</i>	bd7hpb01	asthmabronc_34_ever_ltd	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
34	2004	[Including problems you have already told me about] since [date of last interview/January 2000] have you had any of the health problems listed on this card? Please include any health problems that had already started before that date. (Asthma or wheezy bronchitis) <i>(Feed in information from asthma_30_ever and asthmabronc_16_ever.)</i> You said you had asthma or wheezy bronchitis. Have you had any attacks in the last 12 months?	bd7hpb01 b7asth2m	asthmabronc_34_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
38	2008	Please look at show card C and tell me whether you are currently suffering from any of the following conditions? (Asthma or wheezy bronchitis)	b8khpb01	asthmabronc_38_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
42	2012	Since [date of last interview/four years prior to interview] have you had any health problems listed on this card? Please include any health problems that had already started before that date. (Asthma or wheezy bronchitis) <i>(Feed in information from asthmabronc_38_current and asthmabronc_34_ever.)</i>	B9PKHP02	asthmabronc_42_ever_ltd	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
46	2016	Since [previous interview or four years ago] have you had any of the health problems listed on this card? Please include any problems that had already started before that date. (Asthma or wheezy bronchitis) (Feed in information from <i>asthmabronc_42_ever</i> .)	B10KHPB01	asthmabronc_46_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
50	2020	Do you have any of the following? (Asthma)	CW1_LLI_3	asthma_50_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
50	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3 CW1_LLI_5	asthmabronc_50_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
50	2020	Do you have any of the following? (Asthma)	CW1_LLI_3/CW2_LLI1_3	asthma_50_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
50	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3/CW2_LLI1_3 CW1_LLI_5/CW2_LLI1_5	asthmabronc_50_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
51	2021	Do you have any of the following? (Asthma)	CW3_LLI1_3	asthma_51_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep

Age	Year	Question	Original name	New name	Coding of new variable
					-1 = No information provided -9 = Not in sweep
51	2021	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW3_LLI1_3 CW3_LLI1_5	asthmabronc_51_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
51	2021-2024	Since the last interview, have you had any of the health problems listed on this card? (Feed in information from asthmabronc_46_ever.)	b11khlpb01	asthmabronc_51_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
Cross-sweep indicators					
5	-	DERIVED: Ever asthma by age 5 [cumulative]	-	asthma_5_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
10	-	DERIVED: Ever asthma by age 10 [cumulative]	-	asthma_10_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
16	-	DERIVED: Ever asthma by age 16 [cumulative]	-	asthma_16_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
26	-	DERIVED: Ever asthma by age 26 [cumulative]	-	asthma_26_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
30	-	DERIVED: Ever asthma by age 30 [cumulative]	-	asthma_30_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
5	-	DERIVED: Ever asthma or wheezy bronchitis by age 5 [cumulative]	-	asthmabronc_5_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
10	-	DERIVED: Ever asthma or wheezy bronchitis by age 10 [cumulative]	-	asthmabronc_10_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
16	-	DERIVED: Ever asthma or wheezy bronchitis by age 16 [cumulative]	-	asthmabronc_16_cumul	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
34	-	DERIVED: Ever asthma or wheezy bronchitis by age 34 [cumulative, limited information]	-	asthmabronc_34_cumul_ltd	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
42	-	DERIVED: Ever asthma or wheezy bronchitis by age 42 [cumulative, limited information]	-	asthmabronc_42_cumul_ltd	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided

Age	Year	Question	Original name	New name	Coding of new variable
					-9 = Not in sweep
46	-	DERIVED: Ever asthma or wheezy bronchitis by age 46 [cumulative, limited information]	-	asthmabronc_46_cumul_ltd	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep
51	-	DERIVED: Ever asthma or wheezy bronchitis by age 51 [cumulative, limited information]	-	asthmabronc_51_cumul_ltd	1 = Asthma ever reported up to and including current sweep 2 = No asthma reported up to and including current sweep -1 = Not enough information provided -9 = Not in sweep

Next Steps

Age	Year	Question	Original name	New name	Coding of new variable
30	2020	Do you have any of the following? (Asthma)	CW1_LLI_3	asthma_30_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
30	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3 CW1_LLI_5	asthmabronc_30_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
30	2020	Do you have any of the following? (Asthma)	CW1_LLI_3/CW2_LLI1_3	asthma_30_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
30	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3/CW2_LLI1_3 CW1_LLI_5/CW2_LLI1_5	asthmabronc_30_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
31	2021	Do you have any of the following? (Asthma)	CW3_LLI1_3	asthma_31_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
31	2021	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW3_LLI1_3 CW3_LLI1_5	asthmabronc_31_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep

Millennium Cohort Study

Age	Year	Question	Original name	New name	Coding of new variable
3	2004	Has [cohort member] ever had asthma?	BPASMA00	asthma_3_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
5	2006	Has [cohort member] ever had asthma?	CPASMA00	asthma_5_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
7	2008	Has [cohort member] ever had asthma?	DPASMA00	asthma_7_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
11	2012	Has [cohort member] ever had asthma?	EPASMA00	asthma_11_ever	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
14	2015	Does [cohort member] have asthma?	FPASMA00	asthma_14_current	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
19	2020	Do you have any of the following? (Asthma)	CW1_LLI_3	asthma_19_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep

Age	Year	Question	Original name	New name	Coding of new variable
19	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3 CW1_LLI_5	asthmabronc_19_current1	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
19	2020	Do you have any of the following? (Asthma)	CW1_LLI_3/CW2_LLI1_3	asthma_19_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
19	2020	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW1_LLI_3/CW2_LLI1_3 CW1_LLI_5/CW2_LLI1_5	asthmabronc_19_current2	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
20	2021	Do you have any of the following? (Asthma)	CW3_LLI1_3	asthma_20_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep
20	2021	Do you have any of the following? (Asthma) Do you have any of the following? (Wheezy bronchitis)	CW3_LLI1_3 CW3_LLI1_5	asthmabronc_20_current3	1 = Asthma reported in sweep 2 = No asthma reported in sweep -1 = No information provided -9 = Not in sweep