



SLS-DSU

SCOTTISH LONGITUDINAL STUDY
DEVELOPMENT & SUPPORT UNIT

Scottish Longitudinal Study Data Dictionary



National
Records of
Scotland



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Guide to the data dictionary interface



Online Data Dictionary Interface

- Data dictionary available online at <http://sls.lscs.ac.uk/variables/>
- Four ways to explore (we won't discuss no. 4 here):

1. Search for a keyword within the variable **description**

4. You can also **browse** the full list of tables or full list of variables via this tab

2. If you know the **name** of a variable you can quickly search for it directly

3. Search by **table**. Tables are organised by source (census year, vital events, etc)

Before you start, please read our guidance notes.

SEARCH BROWSE SAVED PROJECTS

Search by Description Search by Variable name Search by Table

This allows use of Boolean search options, search terms such as "+adult -male" can be used to find all entries matching 'adult' but omitting entries that also have the term 'male' from those results. [You can read some guidance notes about Boolean Search parameters here.](#)

Which LS Description / Table Description

SLS

SEARCH

Online Data Dictionary Interface

- Note, there are some types of data the SLS can be linked to, but which are not held in the data dictionary:
 - NHS health data
 - Weather and pollution data
 - SIMD

1. Search by description

- This is probably the simplest way to explore the types of variables that we hold

SEARCH BROWSE SAVED PROJECTS

Search by Description Search by Variable name Search by Table

This allows use of Boolean search options, search terms such as "+adult -male" can be used to find all entries matching 'adult' but omitting entries that also have the term 'male' from those results. [You can read some guidance notes about Boolean Search parameters here.](#)

Which LS Description / Table Description

SLS child SEARCH

Enter your search term in the box

Your search has returned 20 results. Showing 1-20 of 20.

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
AGSYOEC9	SLS	Distribution of residents aged 16+ in all economic position by age of youngest child. 1991.	C10	1991 Census - SLS Members	Yes	→	+
DEPNCHN9	SLS	Dependent child indicator. 1991.	C10	1991 Census - SLS Members	Yes	→	+
FDPCHNT9	SLS	Dependent child in family. 1991.	C10	1991 Census - SLS Members	Yes	→	+
WKPRCHT9	SLS	Women in couple families and lone parents	C10	1991 Census - SLS	Yes	→	+

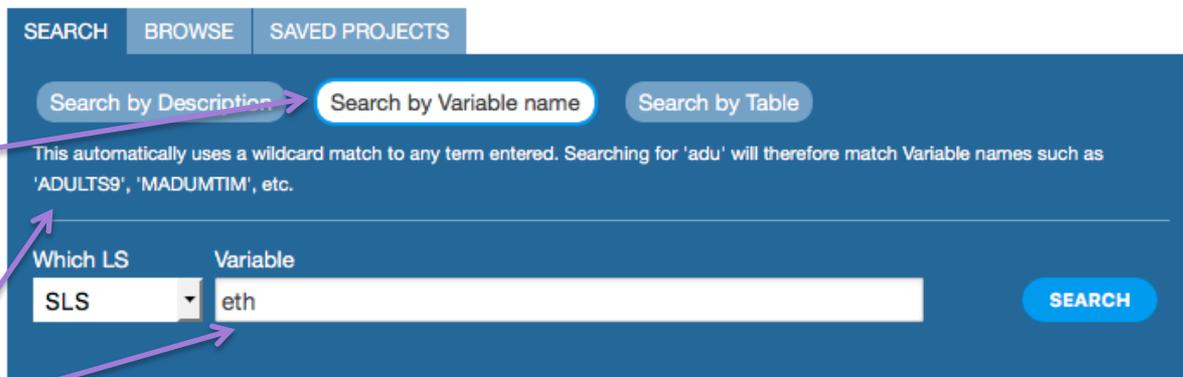


1. Search by description

- This field uses boolean search rules, and works much better if you make use of the operators:
 - [no character] = **OR**, eg 'age father' will find all descriptions containing 'age' or 'father'
 - + = **AND**, eg '+age +father' will find all containing *both* 'age' and 'father'
 - - = **NOT**, eg '+age -father' will find all containing 'age' but without 'father'
 - * = **wildcard**, place at the end of a string, eg 'age*' will find 'age', 'aged', 'ageing' etc
 - "" = **exact phrase**, eg "age at marriage" will only find this specific phrase in variable descriptions
- More information:
<http://calls.ac.uk/variables/guidance/boolean-searches/>

2. Search by variable name

- If you know a variable's name, this is the quickest way to locate it



SEARCH BROWSE SAVED PROJECTS

Search by Description **Search by Variable name** Search by Table

This automatically uses a wildcard match to any term entered. Searching for 'adu' will therefore match Variable names such as 'ADULTS9', 'MADUMTIM', etc.

Which LS Variable

SLS eth SEARCH

Select this button to search by name

Type the full name of the variable, or the first few letters and the search will find all variables beginning that way

Your search has returned 22 results. Showing 1-22 of 22.

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
ETHGRP0	SLS	Ethnic group in Scotland. 2001.	C20	2001 Census - SLS Members	Yes	→	+
ETHGRP0	SLS	Ethnic group in Scotland. 2001.	C21	2001 Census - Non SLS Members	Yes	→	+
ETHGRP1	SLS	Ethnic group in Scotland. 2011.	C30	2011 Census - SLS Members	-	→	+
ETHGRP1	SLS	Ethnic group in Scotland. 2011.	C31	2011 Census - Non SLS Members	-	→	+



3. Search by table

- Here you can view variables grouped by table
- This can be useful if, for example, you want to view all weather or education variables

SEARCH BROWSE SAVED PROJECTS

Search by Description Search by Variable name **Search by Table**

This allows you to select from a list of available Tables. The list of Tables is filtered if a particular LS is selected.

Which LS Table

SLS G03: Weather Variables

SEARCH

Select this button to search by table

Choose a table from the drop-down list

Your search has returned 28 results. Showing 1-25 of 28.

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
Airfrost	SLS	Count of days when the air minimum temperature is below 0 °C	G03	Weather Variables	-	→	+
cloudcover	SLS	Hourly (or 3-hourly) total cloud cover (%) averaged over the month	G03	Weather Variables	-	→	+
consecutivedrydays	SLS	Longest spell of consecutive days with precipitation ≤0.2 mmduring the year	G03	Weather Variables	-	→	+
coolingdegreedays	SLS	The day-by-day sum of the mean number of degrees by which the air temperature is more than a value of 22 °C	G03	Weather Variables	-	→	+

Search results

- Whichever type of search you choose, once you click 'search' your results appear in the space below

SEARCH BROWSE SAVED PROJECTS

Search by Description Search by Variable name Search by Table

This allows use of Boolean search options, search terms such as "+adult -male" can be used to find all entries matching 'adult' but omitting entries that also have the term 'male' from those results. [You can read some guidance notes about Boolean Search parameters here.](#)

Which LS Description / Table Description

SLS child SEARCH

Your search has returned 20 results. Showing 1-20 of 20.

Search results

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
AGSYOEC9	SLS	Distribution of residents aged 16+ in all economic position by age of youngest child. 1991.	C10	1991 Census - SLS Members	Yes	→	+
DEPNCHN9	SLS	Dependent child indicator. 1991.	C10	1991 Census - SLS Members	Yes	→	+
FDPCHNT9	SLS	Dependent child in family. 1991.	C10	1991 Census - SLS Members	Yes	→	+
WKPRCHT9	SLS	Women in couple families and lone parents	C10	1991 Census - SLS	Yes	→	+



Search results – similarity scores

- The search results give you information such as table, LS, and description, but also give more:

SEARCH BROWSE SAVED PROJECTS

Search by Description Search by Variable name Search by Table

This allows use of Boolean search options, search terms such as "+adult -male" can be used to find all entries matching 'adult' but omitting entries that also have the term 'male' from those results. [You can read some guidance notes about Boolean Search parameters here.](#)

Which LS Description / Table Description

SLS child SEARCH

This column tells you if there are comparable variables in the other LSs

Your search has returned 20 results. Showing 1-20 of 20.

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
AGSYOEC9	SLS	Distribution of residents aged 16+ in all economic position by age of youngest child. 1991.	C10	1991 Census - SLS Members	Yes	➔	+
DEPNCHN9	SLS	Dependent child indicator. 1991.	C10	1991 Census - SLS Members	Yes	➔	+
FDPCHNT9	SLS	Dependent child in family. 1991.	C10	1991 Census - SLS Members	Yes	➔	+
WKPRCHT9	SLS	Women in couple families and lone parents	C10	1991 Census - SLS	Yes	➔	+

Search results – similarity scores

- If the column says 'yes' there is a similarity score available, comparing this variable with those in the other LSs (ONS LS and NILS)
- Similarity scores take into account the question wording on the census form as well as the categories the variable is coded into
- They are particularly useful if you are planning to use more than one LS for your research
- You can see the full scale at:
<http://calls.ac.uk/variables/guidance/similarity-scoring/>

Search results – expanded variable view

- To get more detail about a variable you can expand the view

SEARCH BROWSE SAVED PROJECTS

Search by Description Search by Variable name Search by Table

This allows use of Boolean search options, search terms such as "+adult -male" can be used to find all entries matching 'adult' but omitting entries that also have the term 'male' from those results. [You can read some guidance notes about Boolean Search parameters here.](#)

Which LS Description / Table Description

SLS child SEARCH

Your search has returned 20 results. Showing 1-20 of 20.

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
AGSYOEC9	SLS	Distribution of residents aged 16+ in all economic position by age of youngest child. 1991.	C10	1991 Census - SLS Members	Yes	→	+
DEPNCHN9	SLS	Dependent child indicator. 1991.	C10	1991 Census - SLS Members	Yes	→	+
FDPCHNT9	SLS	Dependent child in family. 1991.	C10	1991 Census - SLS Members	Yes	→	+
WKPRCHT9	SLS	Women in couple families and lone parents	C10	1991 Census - SLS	Yes	→	+

Click the arrow to see more info about the variable

Search results – expanded variable view

Your search has returned 20 results. Showing 1-20 of 20.

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
AGSYOEC9	SLS	Distribution of residents aged 16+ in all economic position by age of youngest child. 1991.	C10	1991 Census - SLS Members	Yes	↓	+

Restriction level – see next slide

(Clicking the arrow again collapses the detailed view)

Full description

Variable	AGSYOEC9										
Census	AGSYOEC										
Source	1991 Census										
Restricted?	N										
Table	C10										
Full Description	Distribution of residents aged 16+ in all economic position by age of youngest child. 1991.										
Notes											
SLS Coded	N										
Derived / Derived From	Y / URESIND, AGSEX, AGYCH, ECONPO										
Similar variables in other LSs (Guidance)	8 ONS LS - AGSYOEC9 (table: ME91) - Age distribution of persons usually resident, in all economic positions, by age of youngest child. 1991.										
Similar variables across time within SLS											
Comparable variables for other individuals	C11										
Format / Length / Codelist	Numeric/Y										
Coding notes											
Coding labels / Frequencies	<table border="1"> <thead> <tr> <th>VALUE / LABEL ▲</th> <th>FREQUENCY</th> </tr> </thead> <tbody> <tr> <td>1 / Aged 16-24 with no children in the household</td> <td>n/a</td> </tr> <tr> <td>2 / Aged 16-24 with child(ren) in the household aged 0-15</td> <td>n/a</td> </tr> <tr> <td>3 / Aged 25-34 with no children in the household</td> <td>n/a</td> </tr> <tr> <td>4 / Aged 25-34 with the youngest child in the household aged 0-4</td> <td>n/a</td> </tr> </tbody> </table>	VALUE / LABEL ▲	FREQUENCY	1 / Aged 16-24 with no children in the household	n/a	2 / Aged 16-24 with child(ren) in the household aged 0-15	n/a	3 / Aged 25-34 with no children in the household	n/a	4 / Aged 25-34 with the youngest child in the household aged 0-4	n/a
VALUE / LABEL ▲	FREQUENCY										
1 / Aged 16-24 with no children in the household	n/a										
2 / Aged 16-24 with child(ren) in the household aged 0-15	n/a										
3 / Aged 25-34 with no children in the household	n/a										
4 / Aged 25-34 with the youngest child in the household aged 0-4	n/a										

Similarity score – in this example the variable has an exact match (8) in the ONS LS

Frequencies are gradually being added to the dictionary to help you check sample sizes

Search results – restriction levels

Level	Examples	Permissions		
		SLS Administrators	SLS Support Officers	External Researchers (Safe setting)
1	DOB0 JTITLE0	Access	No Access	No Access
2	ENUMPC1 EASTING9 GRNORTH	Access	With permission can: <ul style="list-style-type: none"> view use to create new derived variables provide data to researchers based on these fields 	No Access
3	DOBMT CARSCO0	Access	Can: <ul style="list-style-type: none"> view use to create new derived variables provide data to researchers based on these fields link variable to approved lookup tables 	Can: <ul style="list-style-type: none"> view use to create new derived variables Cannot: <ul style="list-style-type: none"> remove from the safe-setting (ie cannot be used in intermediate/final outputs)

Search results – saved projects

- 'Save' is a very useful feature if you are compiling variables for an application

SEARCH BROWSE SAVED PROJECTS

Search by Description Search by Variable name Search by Table

This allows use of Boolean search options, search terms such as "+adult -male" can be used to find all entries matching 'adult' but omitting entries that also have the term 'male' from those results. [You can read some guidance notes about Boolean Search parameters here.](#)

Which LS Description / Table Description

SLS child SEARCH

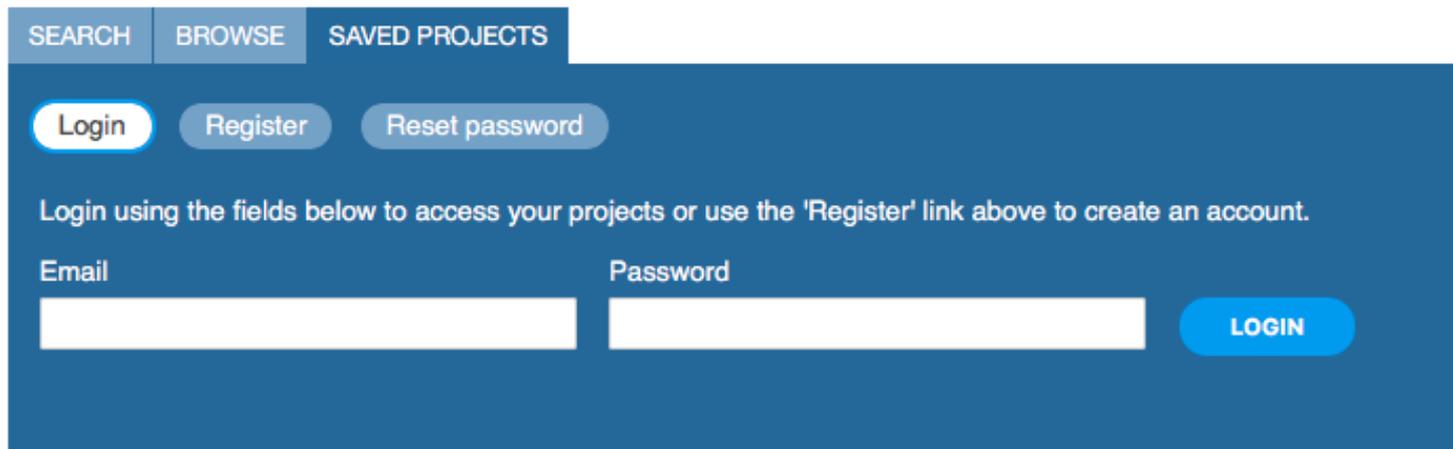
Your search has returned 20 results. Showing 1-20 of 20.

Variable	LS	Variable Description	Table	Table Description	Similar	More	Save
AGSYOEC9	SLS	Distribution of residents aged 16+ in all economic position by age of youngest child. 1991.	C10	1991 Census - SLS Members	Yes	→	+
DEPNCHN9	SLS	Dependent child indicator. 1991.	C10	1991 Census - SLS Members	Yes	→	+
FDPCHNT9	SLS	Dependent child in family. 1991.	C10	1991 Census - SLS Members	Yes	→	+
WKPRCHT9	SLS	Women in couple families and lone parents	C10	1991 Census - SLS	Yes	→	+

Click the + to save the variable to a list for later

Search results – saved projects

- Use this feature to create saved lists of variables to come back to later or download to use with your application
- First set up a login id and password – this allows you to access your saved lists at a later session



The screenshot shows a web interface with three tabs: 'SEARCH', 'BROWSE', and 'SAVED PROJECTS'. Below the tabs are three buttons: 'Login', 'Register', and 'Reset password'. A message reads: 'Login using the fields below to access your projects or use the 'Register' link above to create an account.' Below this are two input fields labeled 'Email' and 'Password', and a blue 'LOGIN' button.

Search results – saved projects

SEARCH | BROWSE | **SAVED PROJECTS**

Projects | Account Details | Logout

You can save variables into Project lists for easy recollection. You can save a variable to a Project list by clicking the "Save to list" button next to the variable that you want to save, you can then enter a new project name or choose from an existing project.

Select project to review

Relationship between health and economic activity **REVIEW**

Choose which list to review from the dropdown

Click the edit icon to add notes or edit the list name

Notes are downloaded with your variable list

Choose to download your list as a PDF or CSV (Excel file)

Relationship between health and economic activity [Edit] [CSV] [PDF] [Trash]

Notes:
Which health variables would be best to use?
Review background papers to decide...

Variable	Table	LS	Variable Description	Table Description	Similar	More	Remove
ECOP1	C30	SLS	Economic activity. 2011.	2011 Census - SLS Members	Yes	➔	⊖
ECOP0	C20	SLS	Economic activity. 2001.	2001 Census - SLS Members	Yes	➔	⊖
HEAP0	C20	SLS	Health. 2001.	2001 Census - SLS Members	Yes	➔	⊖
HEAP1	C30	SLS	Health. 2011.	2011 Census - SLS Members	Yes	➔	⊖

Review variable details or remove them from the list with these buttons





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Individuals and households in the SLS dictionary



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Individuals and households

- In the SLS the unit of observation is the individual person
- Large amounts of information are held about SLS members and their household members at the census dates
- Limited information is held about family members not permanently resident in the household, e.g., children in boarding schools or students
- The 1991 census also recorded details of visitors to the household on census night, but these are not included in the SLS

Definition of 'household'

- **1991:** "either: a) one person living alone; or b) a group of people (who may or may not be related) living, or staying temporarily, at the same address, with common housekeeping."
- **2001:** "one person living alone, or a group of people (not necessarily related) living at the same address with common housekeeping - that is, sharing either a living room or sitting room or at least one meal a day."
- **2011:** "one person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area."

Large households

- Large households are over-represented in the SLS since they have a higher probability of containing someone with an SLS birthdate.

Household size	SLS (%)*	Scotland (%)*
1 person	15.9	34.7
2 people	32.2	34.0
3 people	20.8	15.1
4 people	20.5	11.5
5 or more people	10.7	4.7

Figures are for 2011 Census

Large households - contd

- This affects the representativeness of your sample when you do household or family-level analysis
- This problem can be solved methodologically by either:
 - Only analysing heads of households (though this substantially decreases your population)
 - Weighting the data by a factor of $1/(\text{household size})$

Definition of 'dependent child'

- **1991:** "persons aged 0-15 in a household; or persons aged 16-18, never married, in full-time education and economically inactive."
- **2001:** "a person aged 0-15 in a household (whether or not in a family) or aged 16-18, in full-time education and living in a family with his or her parent(s)."
- **2011:** "any person aged 0 to 15 in a household (whether or not in a family) or a person aged 16-18 in full-time education and living in a family with his or her parent(s) or grandparent(s). It does not include any children who have a spouse, partner or child living in the household."

Other household definition & coding differences

- At 1991, there was no differentiation between children and stepchildren; at 2001 and 2011 a separate category was given for stepchildren
- At 1991, same-sex couples were coded as unrelated individuals; at 2001 and 2011 they were coded as same-sex couples
- Students living away from home during term time were coded at their *home* address in 1991 even if not home on census night; at 2001 and 2011 they were enumerated at their *term-time* address

Other household definition & coding differences

- Household relationships:
 - At 1991, only the relationship between the head of household and other household members was recorded. Other relationships were made based on assumptions (using the most likely situation), using a consistent 'household algorithm'
 - At 2001 and 2011 all relationships are known because of the introduction of a household grid in the census form

Other household definition & coding differences

- There are other small differences between censuses, which your Support Officer will indicate to you if they are relevant to your project



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Vital events (births, deaths, marriage)



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Vital event tables

E01	BIRTH	Vital Events – New Births, Live Births to Sample Mothers and Sample Fathers
E02	DEATH	Vital Events – Deaths of SLS Members, Widow(er)hoods of Sample Members
E03	INFANTMORTALITY	Vital Events – Infant Mortality to Sample Mothers and Sample Fathers
E04	STILLBIRTH	Vital Events – Stillbirths to Sample Mothers and Sample Fathers
E05	MARRIAGE	Vital Events – Marriages of Sample Members
E06	IMMIGRANT	Immigrations of New SLS members from outside UK
E07	EVENTHISTORY	History of events for SLS member
E09	EXTRA DEATHS	Extra deaths as recorded by NHSCR

Birth (Table E01)

- Place, date, time of birth
- Sex of child
- Number of babies in case of multiple births
- Place and date of registration
- Demographic variables, occupation, employment status of parents
- Parents married/unmarried (date of marriage if applicable)
- Usual place of residence of mother and father

Death (Table E02)

- Place and date of death
- Cause of death (ICD coded)
- Demographic variables, occupation and employment status of deceased
- Usual place of residence of deceased (including country)
- Spouse's date of birth
- Found dead indicator

Death (E02) contd

- Death is preferably registered by a relative of the deceased, but may also be done by:
 - any person present when the person died;
 - the deceased's legal representative;
 - the occupier of the property where the deceased lived;
 - anyone else who knows the information to be registered.
- Information (eg, occupation) may be less reliable if the person registering cannot accurately describe the background characteristics of the deceased.

Infant mortality (<1yr) (Table E03)

- Date and place of death
- Date of birth
- Baby's age at death (the younger, the more precise; measured in minutes if directly after birth)
- Cause of death (ICD coded)
- Occupation and employment status of head of household
- Baby's usual place of residence
- Demographic variables for parents
- Parents married/unmarried (date of marriage if applicable)

Stillbirth (Table E04)

- This is a separate registration and not part of birth or death registration
- Same information given as in birth registration plus:
 - Data on cause of death (original and final; ICD coded)
 - Baby's weight
 - Duration of pregnancy

Marriage (Table E05)

- Demographic variables for bride and groom:
 - Marital status
 - Date and country of birth
 - Country of residence
 - Age at marriage
- Occupation of bride & groom (text)
- Date and place of marriage

Immigrant (Table E06)

- Year that SLS member entered Scotland for the first time (from another part of the UK or abroad)
- There is also some information available on emigration and re-entrance, but incomplete and unreliable because:
 - there is no official 'migration registration' in Scotland;
 - it depends on people de-registering with a GP;
 - however, there is no obligation to de-register with GP;
 - some migrations between Scotland and England are not picked up correctly.

Event History (Table E07)

- Lists all registered and unregistered events that happened to SLS member from 1991 onward
- Variables:
 - Date of occurrence of event
 - Type of event

Extra Deaths (Table E09)

- This table records SLS members who have failed to be linked to their death record through the usual matching process.
- This can happen for several reasons:
 - Identifying data used for linkage does not match (eg, name changes due to marriage or divorce)
 - SLS members emigrate (NHSCR only receive vital event records for deaths in Scotland)
 - SLS members found not to have one of the SLS birth dates (In some cases an individual is selected to be an SLS member based on a date of birth which is subsequently found to be incorrect. The individual is kept in the SLS sample but cannot be linked to vital event data)

Extra Deaths (Table E09) contd

- NHSCR data are used to try to trace these 'missing deaths'
- All SLS users interested in deaths are encouraged to include this information to correctly account for people who have not been linked through the usual process.
- Most useful variables:
 - **DOD_ND** – Date of Death of SLS member, as held by NHSCR
 - **LOCATION_ND** – Location of Death of SLS member
 - **DEATH_IND_ND** – Whether death recorded by SLS and NHSCR or NHSCR only



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Socio-economic indicators

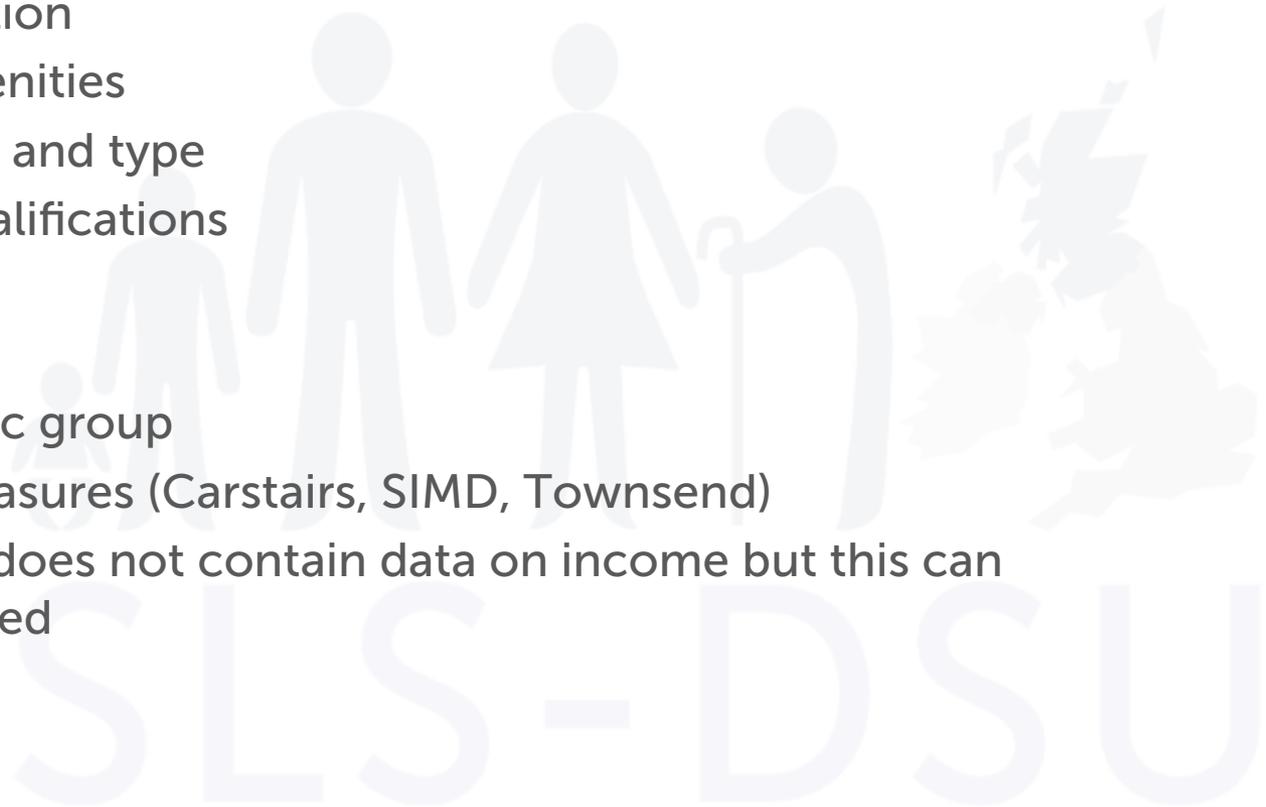


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Socio-economic indicators in the SLS

- Occupation
- Employment status
- Social class/NS-SEC
- Economic position
- Household amenities
- Housing tenure and type
- Educational qualifications
- Hours worked
- Industry code
- Socio-economic group
- Area-based measures (Carstairs, SIMD, Townsend)
- NOTE: the SLS does not contain data on income but this can now be estimated



Occupation

- Occupational scores are very detailed are expressed as 3-digit (1991) or 4-digit (2001, 2010) codes
- The SLS team coded occupations in 1991 and 2001 to both SOC90 and SOC2000 coding scheme (only the SLS has this feature; not LS or census). 2011 data is currently coded to SOC2010 and we hope to code to SOC2000 in the near future

	SOC90 coding scheme	SOC2000 coding scheme	SOC2010 coding scheme
1991	SOC909	SOC20009	-
2001	SOC900	SOC20000	-
2011	-	(to come)	OCCP1

- Some occupational information is available in vital events records, but it is not as accurate as census information (especially in death records)

VALUE / LABEL ▲	FREQUENCY
100 / General administrators; national government (Assistant Secretary/Grade 5 and above)	n/a
101 / General managers; large companies and organisations	n/a
102 / Local government officers (administrative and executive functions)	n/a
103 / General administrators; national government (HEO to Senior Principal/Grade 6)	n/a
110 / Production, works and maintenance managers	n/a
111 / Managers in building and contracting	n/a
112 / Clerks of works	n/a
113 / Managers in mining and energy industries	n/a
120 / Treasurers and company financial managers	n/a
121 / Marketing and sales managers	n/a
122 / Purchasing managers	n/a
123 / Advertising and public relations managers	n/a
124 / Personnel, training and industrial relations managers	n/a
125 / Organisation and methods and work study managers	n/a
126 / Computer systems and data processing managers	n/a
127 / Company secretaries	n/a
130 / Credit controllers	n/a
131 / Bank, Building Society and Post Office managers (except self-employed)	n/a
132 / Civil Service executive officers	n/a
139 / Other financial institution and office managers n.e.c.	n/a
140 / Transport managers	n/a
141 / Stores controllers	n/a
142 / Managers in warehousing and other materials handling	n/a
150 / Officers in UK armed forces	n/a
151 / Officers in foreign and Commonwealth armed forces	n/a

[Show All 373 Categories...](#)



Employment status

(1991: EMPST9, 2001: EMPST0;
2011: EMTP1 + SUMP1)

1	Employee elsewhere classified
2	Manager
3	Foreman/supervisor
4	Self employed employing others
5	Self employed not employing others

These were measured differently on census forms at 1991 and 2001, which resulted in a large number of managers in 1991 compared to 2001, and a small number of supervisors in 1991 compared to 2001.

To make the years comparable, 2001 employment status was recoded according to the 1991 algorithm (EMPST90).

For 2011, EMTP1 can be combined with SUMP1 to get a similar set of categories. There is currently no recoding to match 2011 with the 1991 algorithm.

Social class variables in the SLS – 1991 & 2001

- Social Class was derived using the census questions on occupation and employment status
- There are 3 Social Class variables for 1991 and 2001 in the SLS:
 - SCLAS9 – Social Class in 1991
 - SCLAS0 – Social Class in 2001
 - SCLAS90 – Social Class in 2001 derived according to the 1991 method (comparable to 1991 Social Class SCLAS9)

Social class categories – 1991 & 2001

● Social Class categories:

- I Professional occupations
- II Managerial and technical occupations
- III Skilled non-manual occupations
- IV Skilled manual occupations
- V Partly-skilled occupations
- VI Unskilled occupations

Social class variables in the SLS - 2011

- It is not possible to allocate social grade precisely from 2011 Census information.
- For 2011, the variable SCGP1 is used for social class.
- This measure is the socio-economic classification used by the Market Research and Marketing Industries.
- Developed by the Market Research Society as a method for using 2011 census information to provide a good approximation of social grade.

Social Grade - 2011

- Social Grade categories in the SLS:
 - AB – Higher and intermediate managerial, administrative or professional
 - C1 – Supervisory or clerical and junior managerial, administrative or professional
 - C2 – Skilled manual workers
 - D – Semi-skilled and unskilled manual workers
 - E – Casual or lowest grade workers, pensioners, and others dependent on the welfare state for their income

Social Class: Differences between censuses

- Prior to Census 2001, Social Class was used as the official classification scheme, but then it was considered to be out of date
- In academic research, Social Class is still used and therefore it was coded for 2001 as well. For this reason the Social Grade variable was included for 2011.
- From Census 2001 onward, government organisations have used the National Statistics Socio-economic Classification (NS-SEC) instead of Social Class
- NS-SEC is based on individuals' "employment relations" and moved away from the concept of "skill" and the manual/non-manual divide

NS-SEC categories 2001, 2010

1	Employers in large organisations
2	Higher managerial occupations (NS-SEC2010 'and administrative')
3	Higher professional occupations
4	Lower professional and higher technical occupations
5	Lower managerial occupations
6	Higher supervisory occupations
7	Intermediate occupations
8	Employers in small organisations
9	Own account workers
10	Lower supervisory occupations
11	Lower technical occupations
12	Semi-routine occupations
13	Routine occupations
14	Never worked and long-term unemployed
15	Full-time students
16	Occupations not stated or inadequately described
17	Not classifiable for other reasons

Issues with social class in the SLS

- Social Class is only applicable to those people who have been in paid employment:
 - 1991: people aged 16 and over who have been in paid employment in the last 10 years
 - 2001: people aged 16-74 who have ever been in paid employment
 - Recoded from census, who only coded people who had their last job up to 5 years ago. Like ONS LS and SARS, SLS has all people coded who had their last job longer than 5 years ago.
 - 2011: people aged 16 and over who have ever been in paid employment

Issues with social class in the SLS (contd)

- People who have not ever been in paid employment cannot be assigned to a social class
- This is often the case for:
 - Women who do unwaged work in the household
 - Children and students
 - People who are categorised as 'permanently sick'

Economic position

(1991: ECONPOT9, 2001: ECOPO0,
2011: ECOP1)

1991 categories – 2001 and 2011 have more categories that can be aggregated to match these

1	Employees – Full time (Economically active)
2	Employees – Part time (Economically active)
3	Self-employed – with employees (Economically active)
4	Self-employed – without employees (Economically active)
5	On a Government scheme (Economically active)
6	Waiting to start a job (Economically active)
7	Unemployed (Economically active)
8	Students (Economically inactive)
9	Permanently sick (Economically inactive)
10	Retired (Economically inactive)
11	Looking after home/family (Economically inactive)
12	Other economically inactive

Household amenities

- Central heating
 - 1991: CENHEAT9 – no/in some rooms/in all rooms
 - 2001: CNHH0 – yes/no
 - 2011: CENHEAT1, CENHEATH1 – much more detail on type of heating
- Bath/shower (1991, 2001 only)
 - 1991: BATHSHW9 – none/shared/exclusive
 - 2001: BTSH0 – ‘none’ and ‘shared’ together in one category
- Flush toilet
 - 1991: WC9 – none/shared/exclusive, inside/outside
 - 2001: included in BTSH0
- Car/van access
 - 1991: CARS9 – 0/1/2/3+
 - 2001: CAVH0 – categories from ‘0’ to ‘9’, then ‘10-20’
 - 2011: CAVH1 – values up to 20

Housing

- Tenure
 - 1991: TENURE9
 - 2001: TENH0
 - 2011: TENH1
- Building type
 - 1991: BLDDTYPE9, TYPACCM9
 - 2001: ACCH0
 - 2011: ACCH1
- Number of rooms (and derived overcrowding rate)
 - 1991: DWELROM9 (OCCNORM9)
 - 2001: NORH0 (RMRH0)
 - 2011: NORH1 (RMRH1)
- Lowest floor level
 - 1991: LLACOM9
 - 2001: LFLH0

Highest educational qualification (census)

- 1991: Highest qualification: QMLVHQT9
 1. First degree and higher degree;
 2. Other Higher Qualifications (non-degree);
 3. None
- 2001: Highest qualification: HLQP0
 20. No Qualifications;
 21. 'O' Grade/Standard grade/GCSE/CSE etc/GSVQ/SVQ Level 1 or 2/SCOTVEC module etc;
 22. Higher grade/CSYS/'A' level, etc/GSVQ/SVQ Level 3/ONC/OND etc;
 23. HNC/HND/SVQ level 4 or 5 etc;
 24. First degree/higher degree/Professional qualifications
- 2001: All qualifications: QUPS10 – QUPS80
- 2011: Highest qualification: HLQP1
(Similar to 2001 categories)
- 2011: All qualifications: QUPS101 – QUPS91

Educational qualifications (census) – coding differences

- 1991:
 - Asked of all people aged 18 and over;
 - Only higher qualifications were recorded;
 - Subject, year and name of awarding institution requested for each qualification provided
- 2001:
 - Asked of all people aged 16-74;
 - All levels of qualification recorded, including those achieved at school level;
 - No question on subject, year and name of institution
- 2011:
 - Asked of all people aged 16 or over
 - All levels of qualification, including at school level
 - No question on subject, year and name of institution

Education data from ScotXed

- Data from ScotXed to supplement limited information from censuses
- Currently held for 2007/08 – 2010/11:
 - School census data for every pupil in Local Authority schools
 - Attendance, Lateness, Exclusions
 - Attainment data (SQA)
- Full details available in [SLS Working Paper 6](#)



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Ethnicity and religion



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Ethnicity variables

- 1991:
 - Ethnicity: ETHNIC9
 - 35 categories
 - No 'white' subdivisions
 - No 'mixed' category on form
 - Country of birth: COB9
- 2001:
 - Ethnicity short: ETHGRP0
 - 14 categories
 - Ethnicity long: ETHP0
 - 358 categories, including all possible mixed ethnicities
 - Ethnicity (tick plus additional text response) : ETHNIC10
 - 48 categories
 - Country of birth: COBP0
- 2011:
 - Ethnicity: ETHP1
 - 1369 categories
 - Ethnic Group in Scotland: ETHGRP1
 - 19 categories
 - Country of birth: COBP1

Religion variables

- Question on religion not introduced until 2001
- Religion questions were not compulsory, so there may be some selectivity in responses
- The 2001 census asked an additional question about which religion the individual was brought up in
- SLS has additional 2011 variable listing all possible write-in responses

Religion variables

2001

- Two questions:
 - What religion do you belong to?
RELIGP0
 - What religion were you brought up in?
RELIGR0
- 10 categories:
 - None
 - Church of Scotland
 - Roman Catholic
 - Other Christian (write-in)
 - Buddhist
 - Hindu
 - Muslim
 - Jewish
 - Sikh
 - Another religion (write-in)

2011

- Single question:
 - What religion, religious denomination or body do you belong to?
 - RELIGION1 (192 categories)
 - RELPS1
 - RELPUK (harmonised with ONS LS)
- Same 10 categories as 2001:
 - None
 - Church of Scotland
 - Roman Catholic
 - Other Christian (write-in)
 - Muslim
 - Buddhist
 - Sikh
 - Jewish
 - Hindu
 - Another religion or body (write-in)



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Health (census)



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Health variables

1991 Census

- Long-term illness (LTILL9)
 - “Does the person have any long-term illness, health problem or handicap which limits his/her daily activities or the work he/she can do?”
 1. Has a health problem
 2. Does not have a health problem
- Economic position (ECONPOT9)
 - Category 9: Permanently sick (Economically inactive)

Health variables 2001 Census

- General health (HEAP0)
 - “Over the last twelve months would you say your health has on the whole been:”
 - Good
 - Fairly good
 - Not good
- Long-term illness (ILLP0)
 - “Do you have any long-term illness, health problem or disability which limits your daily activities or the work you can do?”
 - Yes
 - No
- Economic activity (ECOP0)
 - Category 20: Economically Inactive, Permanently sick/disabled

Health variables 2011 Census

- General health (HEAP1)
 - “How is your health in general?”
 - Very good
 - Good
 - Fair
 - Bad
 - Very bad
- Long-term illness (ILLP1)
 - “Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months?”
 - Yes, limited a lot
 - Yes, limited a little
 - No
- Economic activity (ECOP1)
 - Category 18: Economically inactive: Long-term sick or disabled

Health variables 2011 Census

- A new health question was introduced in 2011 giving much richer detail on long-term health conditions
- This provides more direct evidence than the existing questions which did not explicitly ask about disabilities
- A similar question was included for Northern Ireland at 2011, but not for England and Wales

Health variables 2011 Census

- Long-term health condition (LTCOND1)
 - “Do you have any of the following conditions which have lasted, or are expected to last, at least 12 months?”
 - Deafness or partial hearing loss
 - Blindness or partial sight loss
 - Learning disability (for example, Down’s Syndrome)
 - Learning difficulty (for example, dyslexia)
 - Developmental disorder (for example, Autistic Spectrum Disorder or Asperger’s Syndrome)
 - Physical disability
 - Mental health condition
 - Long-term illness, disease or condition
 - Other condition (write-in)

Caregiving 2001

- Caregiving (HELP0)
 - “Do you look after, or give help or support to family members, friends, neighbours or others because of long-term physical or mental ill-health or disability, or problems related to old age?”
 - No
 - Yes, 1-19 hours a week
 - Yes, 20-49 hours a week
 - Yes, 50+ hours a week
 - Instructions to exclude anything done as part of paid employment

Caregiving 2011

- Caregiving (HELP1)
 - “Do you look after, or give any help or support to family members, friends, neighbours or others because of either long-term physical/mental ill-health/disability or problems related to old age?”
 - No
 - Yes, 1-19 hours a week
 - Yes, 20-34 hours a week
 - Yes, 35-49 hours a week
 - Yes, 50 or more hours a week
 - Instructions to exclude anything done as part of paid employment



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Health (NHS NSS)



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Hospital admission and cancer registration data

- Hospital admission and cancer registration data can also be linked to the SLS on request allowing powerful analysis of health outcomes and determinants
- The data are not held by the SLS, but by NHS NSS
- Permission to use the data requires careful justification of which NHS data are requested and why they are needed
- An additional application form to the Public Benefit and Privacy Panel (PBPP) must be completed if health data are requested
- The Northern Ireland Longitudinal Study also allows linkage to extensive health data. The ONS LS for England and Wales contains only cancer registration data

NHS NSS health data

- Databases available via NHS NSS include:
 - Cancer registrations
 - Hospital admissions and discharges
 - Maternity and birth records
 - Scottish Drugs Misuse Database
 - Prescribing Information System
 - Accident and Emergency admissions
- A more complete list of the data is available from the ADLS website:
<http://www.adls.ac.uk/find-administrative-data/introduction-to-nhs-scotland/>



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Geography and migration



Ecological variables

Name	Description
Carstairs	Carstairs deprivation score, decile, quintile 1991/2001/2011
Scottish Index of Multiple Deprivation (SIMD)	Scottish Index of Multiple Deprivation ranks, scores, deciles, quintiles 2004/2006/2009/2012
Townsend	Townsend deprivation score, decile, quintile 1991/2001
Population Density	Population density 1991/2001
Scottish Urban Rural Classification	Urban Rural 6-fold and 8-fold classification 1991/2001/2011

Migration variable examples (internal migration only)

Name	Description
MBCFLAG0	Migrant indicator 1991-2011
MBCDOM0	Moving distance
DISMOV10	Distance moved between censuses (91-01, 01-11)
NPC1IND0	Usual address postcode 1 year ago



Spatial levels in the SLS

	1991	2001	2011
Scottish parliamentary regions	8	8	8
Region	12	-	-
NHS Health Board Area	15	15	14
Council area	56	32	32
Ward (CAS ward)	-	1222	-
NUTS 1-3 (aggregations of wards)	1/4/23	1/4/23	1/4/23
Scottish parliamentary constituencies	73	73	73
Postcode sector	'pseudo' 1003	'CAS' 1010	1,273
Datazone (used in Scottish neighbourhood statistics)	-	6505	6976
Consistent Areas Through Time (CATT)	10058	10058	tbc
Output Area	38254	42604	46351
National grid code	infinite	infinite	infinite

Boundary stability

- In order to make valid comparisons over time, the geographical unit under study should be stable, but inter-census boundary changes make this difficult
- In the SLS, only CATTs (Consistent Areas Through Time) are stable from 1991-2001. CATTs are not yet available for 2011, but will hopefully be available soon

CATTs

- Methods for creating consistent geographies usually depend on the proportional allocation of data from source zones to target zones, which inevitably incurs error
- CATTs have been designed using an alternative method which uses a 'merging' strategy. If a source zone (Output Area) overlaps more than one target zone (CATT), then the affected zones are merged.
- CATTs are appropriate for a wide range of data analyses related to health and welfare
- 2011 CATTs are not yet available, but will be created soon
- More info:
 - Exeter, D. et al (2005) *The creation of 'Consistent Areas Through Time' (CATTs) in Scotland, 1981-2001*. Population Trends 119, 28-36
 - SLS website:
<http://sls.lscs.ac.uk/guides-resources/resources-for-online-sls-users/>

Linkage of other ecological variables

- The SLS can also be used to link to weather and pollution data:
<http://sls.lscs.ac.uk/guides-resources/what-data-are-included/weather-and-pollution-data/>
- If users have their own area-based variables, these can be linked as a look-up table to the SLS
- Users should provide us with an electronic version of their look-up table which includes a key variable to make linkage possible (eg, postcode sector)

Small area geographies and SLS output

- Researchers should bear in mind that tables by small areas will very rapidly have small cell counts, and tables with cell counts below 5 will not be released because they are potentially disclosive (eg a table of ethnicity by postcode sector)
- However, variables from a look-up table linked *via* small geographical areas are often not a problem (eg a table of ethnicity by deprivation decile, linked at postcode sector level)



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For further information

visit sls.lscs.ac.uk

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