# Occupation and social class / socio-economic classification

This note provides some information about the coverage and coding of the 'occupation' and 'social class / socio-economic classification' data that are held in the Vital Events statistical database. It concentrates on what is recorded for Births and Deaths because they are the types of event for which there are the largest numbers of events and in which there is, generally, the most interest. As yet, time has not permitted a similar study of the availability (or otherwise) of such information for other types of event.

The database holds free-text descriptions of the occupations of various people about whom information is collected when the Birth or Death is registered, together with codes for some (but not necessarily all) of their occupations and their social classes / social-economic classifications. In addition, so-called 'primary' and 'secondary' codes are allocated for the household as a whole. To cover all these matters, this note is split into the following sections.

- Descriptions of occupations text.
- Cases for which codes were allocated for the occupation and for the person's social class / National Statistics Socio-Economic Classification (NS-SEC).
- Occupation and NS-SEC code-lists.
- Cases for which 'informative' occupation and NS-SEC codes are held.
- 'Household' occupation and social class / NS-SEC codes

## **Descriptions of occupations - text**

The Vital Events computer system holds all the descriptions of people's occupations that are keyed into the registration computer system, when events are registered, with effect from the start of 1996. (There was a big increase in the amount of data that was held in the computer system for events that were registered with effect from the start of 1996. Text descriptions of occupations were not keyed into the computer system prior to 1996.)

In cases where a person did not have an occupation, or where no information was provided about the person's occupation, the Vital Events computer system holds a single '.' (this indicates that there is no information).

The following people's occupations are normally held, in text form, for events which were registered with effect from the start of 1996.

#### Births

- Father there is information about the father's occupation for almost all births registered by married couples, and for around 95% of births which are 'jointly registered' by unmarried couples. The father's occupation is <u>not</u> recorded in the case of 'sole registration' births.
- Mother for around 85% of births registered by married couples, 65-75% for births jointly registered by unmarried couples, and around 60% of 'sole registration' births.

#### Deaths

- Deceased depending upon the age-group, information may be held in up to 90% of cases. However, it is only around 55-60% for those who died aged 16-19, and there is 'no' occupation information for 0-15 year olds.
- Spouse (if any) depending upon the age-group, information may be held in up to 70-80% of cases. However, it is much lower for younger adults (e.g. only a couple of per cent for those who died aged 20-24), and there is no 'spouse occupation' information for 0-15 year olds.

- Father the percentage for whom this is available varies with the age of the deceased, in the range 80-95%.
- Mother this is available for around two-thirds of those who died aged 0-15 (depending upon the year). For older deaths, the percentage tends to decline with the age of the deceased (presumably because the mothers of people who died at older ages were less likely to have been in employment).

In theory, what is recorded as the Occupation is the present or last full-time occupation (if the person had one). In December 2011, the relevant guidance in Section P of the Registrars' Handbook included the following points:

- 5. The word "occupation" as it is used in the following paragraphs is to be taken as meaning the present or last full-time occupation. Account may be taken of any part-time occupation where the informant so requests.
- 9. Where persons are unemployed or unable to work through disability, the last full-time occupation should be entered. The word "unemployed" should not normally be entered in the register. Retired persons should be described by reference to their last full-time occupation, followed by the word "(retired)", e.g. 'Railway engine driver (retired)'. Account may be taken of any part-time occupation where the informant so requests.
- 10. Where persons have never had an occupation, a horizontal line should be entered in the appropriate space of the register. "Never worked", "Unemployed due to disability" or "Not known" should be inserted in the industry box, as appropriate. "Independent means" may be entered in the appropriate space in the register in respect of persons with private means and no occupation. The employment status for these situations would be 0.
- 11. The term "housewife" is fairly frequently given by informants as an occupation. The registrar should explain that it is not an occupation in the sense of profession, employment, business or calling and there is no requirement for it to be entered in the register, so the field could be left empty. If, however, the informant wishes to have "housewife" or "houseperson" entered as the occupation, the registrar should enter it in the register. The employment status for this type of person would be 0.

However, given the circumstances in which the Vital Events information is collected, one cannot expect that people's 'employment' details will be of the same quality as what is obtained from, say, the Labour Force Survey. Understandably, it may not be possible to obtain all the details that might be required for the 'statistical' information about a dead person to be precisely-defined: for example, a person who registers the death of (say) a distant elderly relative may not know his/her former occupation. In addition, there could be cases where, rather than the deceased's actual last occupation, a more 'prestigious' one is given (e.g. the occupation that applied for most of the deceased's working life, or perhaps a rank in the armed forces rather than a subsequent civilian job), because that is how the family want to remember him/her (and, therefore, what they want to see on the death certificate).

# Cases for which codes were allocated for the occupation and for the person's social class / National Statistics Socio-Economic Classification (NS-SEC)

Analyses of births and deaths by occupation or by social class / NS-SEC use codes rather than the occupation text. These codes are derived from the occupation text and the person's employment status (latter is categorised in a way which is less detailed than that used to define the NS-SEC - e.g. there is no question about the number of employees).

However, codes are not allocated in every case where the text of the occupation is held. It seems that it was decided (perhaps when the Vital Events computer system was first being developed, for introduction for events registered from the start of 1974) that:

- there was no need to analyse the numbers of marriages by the occupations of the bride and the groom - so none of that information is coded; and
- at most two occupations were relevant to the analysis of deaths:
  - o the father's and mother's occupation, in the case of deaths aged 0-15; and
  - o the deceased's and any spouse's occupation, for deaths of older people.

In addition, it appears to have been decided that:

- for 'joint registration' births, up to and including 1995, the father's occupation need not be coded - those births would be counted solely on the basis of the mother's occupation and
- married females' occupations need not be coded, up to and including 1995 it seems that, in any occupation-based analysis, they would be counted on the basis of their husbands' occupations. Therefore, up to and including 1995:
  - o the mother's occupation is not coded for births to married couples;
  - o the deceased's occupation is not coded for married female deaths; and
  - the spouse's occupation is not coded for married male deaths.
- presumably for similar reasons, up to and including 1995, the mother's occupation was very seldom coded in the case of deaths of children (0-15 year olds).
- for the years from 2001 to 2010, the numbers of deaths need only be analysed by occupation for people who died aged under 75 so no occupation codes at all are held if the deceased was aged 75 or over and the death was registered from 2001 to 2010, inclusive. However, occupation codes are held for deaths aged 75 or over which were registered from the start of 2011.

## Occupation and NS-SEC code-lists

The Vital Events computer system has used the following **occupation code-lists**:

- 1974 to 1979 OCC70 codes '001' to '223', and also '.', '224', '225' and '999'
- 1980 to 1990 OCC80 codes '001' to '365', and also '.'
- 1991 to 2000 OCC90 codes '001' to '496', and also '.' and '999'
- 2001 to 2010 SOC2000 codes '0010' to '9259', and also '.' and '9999'
- 2011 onwards SOC2010 codes '0010' to '9279', and also '.' and '9999'

## Note:

- These code-lists can be found in a spread sheet in the 'Socio-Economic Code Lists' workbook, available via a link from the <u>Code-lists Used in Vital Events</u> <u>Statistics</u> page of the National Records of Scotland (NRS) web site.
- NRS started to allocate SOC2010 codes to the Vital Events data in September 2012. As well as allocating SOC2010 codes to the records for all newly-registered events, NRS also allocated SOC2010 codes retrospectively to all the records for events which were registered with effect from the start of 2011. That approach was taken because there was little point in NRS starting to allocate SOC2010 codes in January 2011 when it knew that SOC2000 would be the basis of the only 'population by SOC/NS-SEC' figures which would available for use with the final Vital Events statistics for 2011 when they were published in August 2012. Indeed, SOC2010-based 'population' figures for Scotland did not become available until November 2013 (when Scotland's first 2011 Census results using SOC2010, and NS-SEC codes based upon it, were published in 'Statistical Bulletin Release 2B'). Therefore, the final Vital Events figures for 2012 (published in August 2013) were the first for which SOC2010-based rates could be calculated a little later.
- When the final data for 2011, 2012 and 2013 were subsequently scrutinised, invalid codes were found in a small proportion of cases. It is assumed that these are due to 'initial teething troubles' with NRS's use of SOC2010: for example, staff allocating codes that were used in SOC2000 but are not valid in SOC2010. There

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were more such errors in the data for 2012 than for 2011 because NRS had allocated SOC2010 codes to all the data for 2012 before it started to allocate them retrospectively to the data for 2011, and so 'teething troubles' had more effect on the data for 2012. No such errors were found in the data for 2013.

- The values given after 'and also' are ones that appear in the data but are not actually mentioned in the relevant occupation code-list: they might be ad-hoc additions.
- The 'OCC70' codes in the database have leading zeroes, although they are not shown in the code-list.
- In what follows, a code is described as being 'informative' if it relates to a specific occupation (or social class / socio-economic classification), and is described as 'uninformative' if it is for a category such as 'unemployed', 'not stated', etc.

The uninformative occupation codes that were used in each period are as follows:

#### • 1974 to 1979 - OCC70

- '223' for 'inadequately described occupations';
- '224' and '225' (whose meanings are not recorded in our occupation codelist); and
- o '.', and '999'

## • 1980 to 1990 - OCC80

- '349' for 'inadequately described';
- o '350' for 'not known',
- '360' to '365' for other cases for which there is no occupation, or it is not known (e.g. student, permanently sick, housewife, not stated, etc) and also
   '.'

#### • 1991 to 2000 - OCC90

- '479' to '496' for cases for which there is no occupation, or it is not known (e.g. inadequately described, student, permanently sick, housewife, not stated, etc), and also
- o '.' and '999'

## • 2001 to 2010 - SOC2000

- '0010' to '0090' for cases for which there is no occupation, or it is not known (e.g. inadequately described, student, permanently sick, retired, not stated, etc), and also
- o '.' and '9999'

## • 2011 onwards - SOC2010

- '0010' to '0090' for cases for which there is no occupation, or it is not known (e.g. inadequately described, student, permanently sick, retired, not stated, etc), and also
- o '.' and '9999'

The social class / NS-SEC code-lists used have been as follows:

## up to 2000 - social class

- o '1' to '6'. '8'. '9'.
- o codes '8', '9' and '.' are 'uninformative'

## • 2001 onwards - NS-SEC

- o '0' to '9'.
- o codes '8', '9' and '.' are 'uninformative'

#### Note:

These code-lists can be found in spread sheets in the 'Socio-Economic Code Lists'
workbook, which is available via a link from the 'Code-lists Used in Vital Events
Statistics' page of the web site.

• 'Uninformative' codes are for (e.g.) 'inadequately described', 'not stated', etc.

## Cases for which 'informative' occupation and NS-SEC codes are held

As a result of the decisions which were taken about which occupations should be coded, 'informative' occupation and social class / NS-SEC codes are held in the following cases:

#### Births

## Father

- up to 1995 for almost all births which were registered by married couples. However, <u>not</u> coded for births which were jointly registered by unmarried couples, or which were solely registered by the mother.
- ➤ 1996 onwards for about 98% of births registered by married couples, and varying around 90% for births jointly registered by unmarried couples. Not collected (and therefore not coded) for 'sole registration' births.

## Mother

- up to 1995 varying by year: 75-90% for births jointly registered by unmarried couples; and in the range 65-90% for 'sole registration' births. not coded for births which were registered by married couples.
- ➤ 1996 onwards around 85% for births registered by married couples, 65-75% for births jointly registered by unmarried couples, and 55-65% for 'sole registration' births.

#### Deaths

## Deceased

- > up to 2000
  - aged 0-15 not at all
  - aged 16+ in most cases (Note: but not at all for married females who died in 1995 and earlier years)
- > 2001 to 2010
  - aged 0-15 not at all
  - aged 16-74 in most cases
  - aged 75+ not at all
- > from 2011
  - aged 0-15 not at all
  - aged 16-74 in most cases
  - aged 75+ in most cases

## Spouse (if any)

- > up to 1995
  - deceased aged 0-15 not at all
  - deceased aged 16+ in small proportions of cases
- > from 1996 to 2000
  - deceased aged 0-15 not at all,
  - deceased aged 16+ for larger proportions
- > 2001 to 2010
  - deceased aged 0-15 not at all
  - deceased aged 16-74 varying proportions
  - deceased aged 75+ not at all
- > from 2011
  - deceased aged 0-15 not at all
  - deceased aged 16-74 varying proportions
  - deceased aged 75+ varying proportions

## Father

- > up to 1990
  - for most fathers of 0-9 year olds

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- for very few (if any) fathers of 10-15 year olds
- not at all for fathers of those aged 16+
- > for 1991 onwards
  - for most fathers of 0-15 year olds
  - not at all for fathers of those aged 16+

#### Mother

- > up to 1995
  - for very few (if any) mothers of 0-15 year olds
  - not at all for mothers of those aged 16+
- > for 1996 onwards
  - for most mothers of 0-15 year olds
  - not at all for mothers of those aged 16+

# 'Household' occupation and social class / NS-SEC codes

Because codes for the occupation and social class / NS-SEC may not have been allocated for all the people about whom information is collected when an event is registered, the Births and Deaths datasets include the following fields:

- primary household occupation code ('occcd1')
- primary household social class / SEG ('sclacd1')
- secondary household occupation code ('occcd2')
- secondary household social class / SEG ('sclacd2')

These fields' values are derived from all the information which was coded for the relevant members of the household, based on the system's definitions of which person's details should be used in various situations.

In particular, it should be noted that, for deaths of:

- **0-15 year olds**, the 'primary' fields contain the father's codes (and the 'secondary' fields contain the mother's codes) except in cases where '.' is all that is held for the father's codes, in which case the 'primary' fields contain the mother's codes;
- Married females, the 'primary' fields contain the husband / spouse's codes, and the 'secondary' fields contain the wife / deceased's codes. This applies even in cases where the husband / spouse's codes are 'uninformative' and the wife / deceased's codes are for specific occupations / SEGs.

For births, what is done is determined purely by the type of registration. Up to 1995, only one parent's details were coded: which one depended upon the type of registration. Since then, informative occupation and social class / SEG codes are available for both parents for most births, so in theory one could choose which parent's details should be used for the 'primary' fields. However, the decision is still based solely on the type of registration:

- for a married couple, the 'primary' fields contain the father's details. This applies even in cases where the father's details have 'uninformative' codes (e.g. 'not known') and the mother's details have codes for specific occupations / SEGs;
- for joint registration by an unmarried couple (whether or not living at the same address), and for a 'sole registration', the 'primary' fields contain the mother's details. This applies even in cases where the mother's details have 'uninformative' codes (e.g. 'not known') and the father's details have codes for specific occupations / SEGs.