

# Assessing the reliability of recording ethnic group at death registration in Scotland using a cross-check with the 2011 Census

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# Background

- Very few countries record ethnic group of deceased – New Zealand and USA
- Potential source of valuable information on causes of death
- After consultation, Scotland began to request ethnic group of deceased at death registration in 2012
- Entirely voluntary

# Background

- 19 ethnic groups, same as 2011 Scotland Census
- 2012 deaths: 96.0% White, 0.6% non-White, 3.0% “not willing to provide”, 0.4% “unable to provide”
- 2011 Census – 4% non-White
- **Are results reliable?**
- NRS asked to assess accuracy by comparing with 2011 Census records

# Matching 2012-2014 Death and 2011 Census Records

- used first name, surname, sex, date of birth and postcode (or parts thereof)
- if not exact match, “threshold” score for likely match
- some Death Registration Records (DR) did not match Census Record (CR)
  - e.g. person not in Scotland at time of 2011 Census

# Overall results

- 163,876 deaths in 2012-2014. 95.9% had ethnicity
- after linkage 85.9% had ethnicity in both records
- of which 93.8% had same ethnicity in both records, and 99.7% same at White/non-White level

# “Most reliable” cases

- High quality match and death registered by partner, child, sibling or parent of deceased ...
- Of such cases with ethnicity from both records:
  - 94.7% had same ethnicity in both records, and 99.8% same at White/non-White level
  - overall % agreement so high because 98.6% of those with White Scottish in DR had same in CR
- lower % agreement for other ethnicities
  - only 64% of those with White Other British in DR had same in CR
  - only 78% of those with Indian in DR had same in CR

## “Most reliable” cases with differences between DR and CR

- 5,163:
  - 2,859 had White Other British in DR and White Scottish in CR
  - 660 had White Scottish in DR and White Other British in CR
- for many such cases, ethnicity in DR seems to have been based on the deceased’s country of birth

# DRs with no ethnicity information

- 5,461 were matched to CR with ethnicity information
- only 78% had White Scottish in CR – vs. 91% of DRs which had ethnicity
- most other ethnicities over-represented among cases with no DR ethnicity
  - White Other British 13.8% in CR only v 6.6% in DRs
  - White Irish 2.3% v 1.1%
  - Pakistani 0.8% vs. 0.2%;
  - Indian 0.5% vs. 0.1%;

# Conclusions

- Requesting ethnicity at death registration widely acceptable in Scotland
- high overall % agreement with Census due to very high % agreement for White Scottish
- lower % agreement for most other ethnicities
- so data ***not at present suitable for calculating reliable mortality rates*** by ethnicity
- NRS aims to improve future data quality

# Any questions?

- Further information available from NRS website:

<https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/deaths-background-information/ethnicity-of-the-deceased-person>