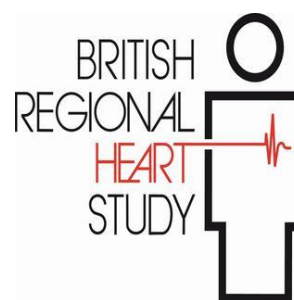# BRHS Mortality follow-up

Follow-up period Baseline 1978 (Q1) to August 2025

Data file: BRHS ALLMORT_uptoAUG2025 P14.dat

Data dictionary: BRHS ALLMORT_uptoAUG2025 P14 Data Dictionary.xlsx

Follow-up period Baseline 1978-80 (Q1) to August 2025

All BRHS cohort participants (n=7735) have been flagged for death notifications through Central Registries in England and Scotland since the study baseline (1978-80). Information was received on the date of death, and coded cause of death using International Classifications of Diseases 10th Revision (ICD-10). The data has been provided annually by NHS England, NHS Scotland or their predecessor organisations.

NOTE: Recommended cutoff date
For the most recent month (August 2025), death notifications are likely to be incomplete because some reports may be delayed due to post-mortem examinations and other administrative procedures. Therefore, it is advisable to treat 31 July 2025 as the cutoff date for complete mortality data.

To protect participant confidentiality the following steps were taken:

- The original 4-digit ICD-10 codes were recoded into less granular 3-digit ICD-9 codes.
- Dates of death were perturbed by randomly shifting them by 1–14 days.

What is included in the BRHS Mortality Dataset

1. Perturbed date of death (day, month, year). Dates of death were perturbed by adding a random number between 1 and 14 days to the actual date of death.

2. Cause of death

   2.1. **Cause of death category**
   Using ICD-9 codes, deaths have been categorised in a separate 7 category variable, as:-

   Cause of death category:
   1= Major CHD/MI death (ICD-9 codes :410 – 4149)
   2= Stroke death (ICD-9 codes: 430 – 4389)
   3= Other CVD death (ICD-9 codes: 390 - 459(excluding 410-4149 and 430-4389))
   4= non-CVD deaths all other ICD-9 codes (i.e. excluding all ICD codes listed in 1-3)
   8 = Died abroad - Cause unknown
   9= Alive
   10 = Lost to follow-up

   2.2 **ICD-9 (3-digit code)** for cause of death (International Classification of Diseases, 9th Revision)
   IMPORTANT NOTES:
   - The ICD-9 variable is an **alphanumeric** variable and therefore need to be treated as character/string/text variable while analysing the data
   - Those who died abroad or whose cause of death for some reason is unknown (cdeath=8) or who were lost to follow up (cdeath=10), <u>will not have</u> an ICD-9 code.

   3. A perturbed censoring date (indicating when a participant either died or was lost to follow-up)

BRHS MORTALITY FILE

Variable description	Units/category labels	BRHS variable name
Study ID		
Perturbed date of death		serial
Date of death (Day)	1-31	Pdd
Date of death (Month)	1-12	Pdm
Date of death (Year)	1978 - 2025	Pdy
Cause of Death (category)	1= Major CHD/MI ICD-9= 410 - 4149 2= Stroke ICD-9= 430 - 4389 3= other CVD ICD-9= 390 - 459 (excluding 410-414 and 430-438) 4=Non-CVD ICD-9= all other 8 = Died abroad/Cause unknown ICD9=XXXX 9= Alive ICD-9=XXXX 10= Lost to follow up - date Embarked or registration cancelled	cdeath
Cause of death coded as ICD-9 3-digit	ICD-9 code = Available since baseline (1978) to End of follow-up August 2025 Where there is no death or cause is unknown the ICD-9 code has been set to "XXX"	icd9death_3Dig
Date censored - Day	1-31	pCensoredDate_d
Date censored - Month	1-12	pCensoredDate_m
Date censored - Year	1978-2025	pCensoredDate_y

ICD-9   = International Classification of Diseases, 9th Revision