

Supplementary file 1: Categorisation of Causes of Death

| # | Detailed Category (26) | ICD-10 | Grouped Category (8) |
|----|---|-----------------------------------|--------------------------|
| 1 | Infectious diseases | A00-B99 | Other |
| 2 | Lung cancer | C33-C34 | Cancers |
| 3 | Prostate cancer | C61 | Cancers |
| 4 | Breast cancer | C50 | Cancers |
| 5 | Bowel cancer | C18-C21 | Cancers |
| 6 | Other cancers | All other C codes | Cancers |
| 7 | Diabetes | E10-E14 | Other |
| 8 | Dementia and Alzheimer's | F01, F03, G30 | Dementia and Alzheimer's |
| 9 | Mental and behavioural disorders excluding dementia * | All other F codes | Other |
| 10 | Nervous system diseases excluding Alzheimer's | All other G codes | Other |
| 11 | Ischaemic heart disease | I20-I25 | Circulatory |
| 12 | Cerebrovascular | I60-I69 | Circulatory |
| 13 | Other circulatory | All other I codes | Circulatory |
| 14 | Influenza and pneumonia | J09-J18 | Respiratory |
| 15 | Chronic lower respiratory diseases | J40-J47 | Respiratory |
| 16 | Other respiratory | All other J codes | Respiratory |
| 17 | Digestive excluding cirrhosis | K00-K69 K77-K99 | Other |
| 18 | Cirrhosis and other diseases of the liver | K70-K76 | Other |
| 19 | Genitourinary | N00-N99 | Other |
| 20 | Perinatal conditions | P00-P96 | Other |
| 21 | Ill-defined | R00-R99 | Other |
| 22 | Suicide and injury/poisoning of undetermined intent * | X60-X84, Y10-Y34, Y87.0, Y87.2 | External |
| 23 | Accidents * | V01-X59, Y85-Y86 | External |
| 24 | Other external * | All other X&Y codes | External |

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|----------------|--------------|--|--------------|
| 2 5 | Residual | All D Residual E codes All H All L All O All M All Q | Residual |
| 2 6 | Drug-related | F11-F15, F19, Plus X40-X44, X60-X64, X85, Y10-Y14 where a controlled drug was present in the body. | Drug-related |

* excluding deaths which are also classified as drug-related.

As the drug-related codes overlap with mental and behavioural causes (exc. dementia) and external causes (suicides, accidents and other external), where a death would appear in both categories, we included it in the drug-related category only, and therefore the other 4 categories exclude drug-related deaths. This was done for two reasons: firstly, the interest in the impact of recent drug-related death trends; and secondly, because of ICD coding changes in 2011¹ there is a discontinuity in the figures for external causes and mental and behavioural causes. This change caused deaths which would previously have been coded as mental and behavioural causes to be coded as external causes. As this change occurred at a key point in the time period we are analysing, it would give misleading results on the relative impact of these causes on life expectancy growth. The coding change did not affect the figures for drug-related deaths, so by selecting these as a separate category, the discontinuity is avoided.

¹ <https://www.nrscotland.gov.uk/files/statistics/vital-events/changes-to-coding-of-causes-of-death-between-2010-2011.pdf>.