eTable1: Country specific mortality rates by age group, birth cohort socio-economic status (SES), and Sex.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Group | Country | | | | | | | | | Pooled | | |
|  | France | | | UK | | | USA | | |
| Age (years) | Person years | # deaths | Rate per 1000 PY | Person years | Deaths | Rate per 1000 PY | Person years | Deaths | Rate per 1000 PY | Person years | Deaths | Rate per 1000 PY |
| < 35 | 345742 | 276 | 0.80 | 961552 | 642 | 0.67 | 576439 | 452 | 0.78 | 1883733 | 1370 | 0.73 |
| 35 - 40 | 224857 | 247 | 1.10 | 439638 | 380 | 0.86 | 367076 | 423 | 1.15 | 1031571 | 1050 | 1.02 |
| 41 - 45 | 224884 | 352 | 1.57 | 422032 | 669 | 1.59 | 402612 | 764 | 1.90 | 1049528 | 1785 | 1.70 |
| 46 - 50 | 189573 | 434 | 2.29 | 388667 | 1079 | 2.78 | 408360 | 1280 | 3.13 | 986600 | 2793 | 2.83 |
| 51 - 55 | 149894 | 522 | 3.48 | 346396 | 1717 | 4.96 | 383678 | 1887 | 4.92 | 879968 | 4126 | 4.69 |
| 56 - 60 | 120646 | 724 | 6.00 | 284479 | 2485 | 8.74 | 340204 | 2703 | 7.95 | 745329 | 5912 | 7.93 |
| 61 - 65 | 92973 | 852 | 9.16 | 224856 | 3215 | 14.30 | 286915 | 3795 | 13.23 | 604744 | 7862 | 13.00 |
| 66 - 70 | 62668 | 887 | 14.15 | 161133 | 4047 | 25.12 | 229174 | 4883 | 21.31 | 452975 | 9817 | 21.67 |
| 71 - 75 | 35056 | 779 | 22.22 | 100761 | 4146 | 41.15 | 167629 | 5506 | 32.85 | 303446 | 10431 | 34.38 |
| 76 - 80 | 15745 | 586 | 37.22 | 52397 | 3468 | 66.19 | 104181 | 5409 | 51.92 | 172323 | 9463 | 54.91 |
| 81 - 85 | 5690 | 409 | 71.88 | 20508 | 2176 | 106.10 | 51465 | 4178 | 81.18 | 77663 | 6763 | 87.08 |
| 85+ | 1773 | 242 | 136.49 | 8061 | 1283 | 159.16 | 23315 | 3735 | 160.20 | 33149 | 5260 | 158.68 |
| Birth cohort |  |  |  |  |  |  |  |  |  |  |  |  |
| <1925 | 93184 | 2020 | 21.68 | 624410 | 16411 | 36.28 | 1092504 | 24432 | 22.36 | 1810098 | 42863 | 23.68 |
| 1925-1934 | 278522 | 2187 | 7.85 | 634431 | 5187 | 8.18 | 872457 | 7381 | 8.46 | 1785410 | 14755 | 8.26 |
| 1935-1944 | 382845 | 1178 | 3.08 | 727916 | 2217 | 3.05 | 596021 | 2061 | 3.46 | 1706782 | 5456 | 3.20 |
| 1945-1954 | 324276 | 510 | 1.57 | 749449 | 1019 | 1.36 | 507160 | 892 | 1.76 | 1580885 | 2421 | 1.53 |
| 1955-1964 | 343918 | 378 | 1.10 | 502541 | 374 | 0.74 | 245626 | 231 | 0.94 | 1092085 | 983 | 0.90 |
| 1964+ | 46754 | 37 | 0.79 | 171736 | 99 | 0.58 | 27281 | 18 | 0.66 | 245771 | 154 | 0.63 |
| SES |  |  |  |  |  |  |  |  |  |  |  |  |
| Professional | 304812 | 924 | 3.03 | 541001 | 3642 | 6.73 | 1276902 | 9100 | 7.13 | 2122715 | 13666 | 6.44 |
| Intermediate | 129898 | 723 | 5.57 | 857819 | 3934 | 4.59 | 533133 | 3632 | 6.81 | 1520850 | 8289 | 5.45 |
| Skilled-non manual | 786353 | 2735 | 3.48 | 1615280 | 11132 | 6.89 | 1114118 | 17075 | 15.33 | 3515751 | 30942 | 8.80 |
| Skilled-manual | 239945 | 1850 | 7.71 | 364376 | 6335 | 17.39 | 347235 | 4808 | 13.85 | 951556 | 12993 | 13.65 |
| Missing | 8488 | 78 | 9.19 | 32008 | 264 | 8.25 | 69661 | 400 | 5.74 | 101669 | 664 | 6.53 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1273139 | 5724 | 4.50 | 3147802 | 24455 | 7.77 | 2690147 | 31233 | 11.61 | 7111088 | 61412 | 8.64 |
| Female | 196361 | 586 | 2.98 | 262682 | 852 | 3.24 | 650902 | 3782 | 5.81 | 1109945 | 5220 | 4.70 |

eTable 2: ICD codes used for cause of death determination.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ICD revision (range of codes) | | | | |
| Cause of death | 6 | 7 | 8 | 9 | 10 |
| All solid cancers | 140-199 | 140-199 | 140-199 | 140-199 | C00-C80,  C97 |
| Esophagus | 150 | 150 | 150 | 150 | C15 |
| Stomach | 151 | 151 | 151 | 151 | C16 |
| Colon/small intestine | 152-153 | 152-153 | 152-153 | 152-153 | C17-C18 |
| Rectum | 154 | 154 | 154 | 154 | C19-C21 |
| Liver/gallbladder/biliary p. | 155-156 | 155-156 | 155-156, 197.8 | 155-156 | C22-C24 |
| Pancreas | 157 | 157 | 157 | 157 | C25 |
| Peritoneum/other digestive | 158-159 | 158-159 | 158-159 | 158-159 | C26,C48 |
| Larynx | 161 | 161 | 161 | 161 | C32 |
| Lung/ trachea/ bronchus | 162-163 | 162.0-162.1, 162.8, 163 | 162 | 162 | C33-C34 |
| Connective tissue | 197 | 197 | 171 | 171 | C46.1,C49 |
| Breast | 170 | 170 | 174 | 174-175 | C50 |
| Ovary | 175 | 175 | 183 | 183 | C56, C57.0-C57.4, C57.8 |
| Prostate | 177 | 177 | 185 | 185 | C61 |
| Kidney | 180 | 180 | 189.0-189.2 | 189.0-189.2 | C64-C66 |
| Bladder | 181 | 181 | 188, 189.3-189.9 | 188,  189.3-189.9 | C67-C68 |
| Brain, nervous system | 193 | 193 | 191-192 | 191-192 | C70-C72 |
| Thyroid | 194 | 194 | 193 | 193 | C73 |
| Haematopoietic and Lymphoid Cancers | | | | | |
| Hodgkin's Disease | 201 | 201 | 201 | 201 | C81 |
| Non-Hodgkin’s Lymphoma | 200, 202,  205 | 200, 202,  205 | 200, 202,  275.5 | 200, 202,  273.3 | C46.3, C88.1, C82-C85, C88.0, C88.3, C91.4, C96 |
| Multiple Myeloma | 203 | 203 | 203 | 203 | C88.2, C88.7, C88.9,  C90 |
| Leukemia and Aleukemia | 204 | 204 | 204-207 | 204-208 | C91.0-C91.3,  C91.5-C91.9, C92-C95 |
| Cardiovascular diseases |  |  |  |  |  |
| Hypertensive disease | 440-447 | 440-447 | 400-404 | 401-405 | I10-I15 |
| Ischaemic Heart Disease | 420-422 | 420-422 | 410-414 | 410-414 | I20-I25 |
| Other Heart diseases | 430-434,  465 | 430-434,  465 | 420-429,  450 | 415-429 | I26-I52 |
| Cerebrovascular diseases | 330-334 | 330-334 | 430-438 | 430-438 | I60-I69 |
| Other circulatory diseases | 400-416, 450-464,  466-468 | 400-416,  450-464,  466-468 | 390-398, 440-448,  451-458 | 390-398,  440-459 | I00-I09,  I70-I99 |