**Identified outlier years of mortality indices by cause of death and model**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **The mortality models** |  | |  | | |  |
| **Males** | **Females** | **Males** | **Females** | **Males** | **Females** |
| Poisson Lee–Carter | IV: 1970,  1972–1975 | IV: 1970–1975 |  |  |  |  |
| Poisson Carter–Lee |  |  |  |  |  |  |
| Binomial Lee–Carter | IV: 1970,  1973–1975 | IV: 1970–1975 |  |  |  |  |
| Binomial Carter–Lee |  |  |  |  |  |  |
| Poisson Lee–Carter with two factors | I: 2003, 2005;  IV: 1974–1975;  X: 1971 | VI: 1979–1980 | X: 1971 | VI: 1979 |  |  |
| Poisson Lee–Carter with two factors (multi-population extension) | IX: 1973 | IV: 1970–1975 |  |  |  |  |
| Binomial Lee–Carter with two factors | I: 2003, 2005;  IV: 2004–2005;  X: 1971 | I: 2003;  VI: 1979 | X: 1971 | VI: 1979 |  |  |
| Binomial Lee–Carter with two factors (multi-population extension) | IX: 1972–1978 | IV: 1970–1975 | I: 1971;  XIV: 1971 |  |  |  |
| CBD | IV: 1970,  1973–1975 | IV: 1970–1975 | I: 1994,  2020–2021 |  |  |  |
| CBD (multi-population extension) |  |  |  |  |  |  |
| reduced Plat with three factors | IV: 1970–1975;  X: 1980 | IV: 1973–1974;  VI: 1979–1980 | VI: 1971;  IX: 2012–2019;  X: 1971 | VI: 1980–1982;  XIV: 2016, 2021;  XX: 2021 | VI: 1971, 1990;  X: 1971;  XI: 1971 | II: 1971;  IV: 2019;  VI: 1981;  IX: 2017–2018, 2021;  X: 1971, 1973;  XIV: 2003, 2016, 2021;  XX: 2006 |
| reduced Plat with three factors (multi-population extension) |  |  | IX: 2017;  XIV: 1971 |  | IX: 2017–2019;  XIV: 1970–1971;  XX: 1990 |  |
| reduced Plat with two factors | IV: 1970,  1973–1975 | IV: 1970–1975 | I: 2021 |  |  |  |
| reduced Plat with two factors (multi-population extension) |  |  | I: 1970, 1994, 2020–2021;  XIV: 2018 | XIV: 2021 |  |  |

*Causes of death:*

I Certain infectious and parasitic diseases,

II Neoplasms,

IV Endocrine, nutritional and metabolic diseases,

VI Diseases of the nervous system,

IX Diseases of the circulatory system,

X Diseases of the respiratory system,

XI Diseases of the digestive system,

XIV Diseases of the genitourinary system,

XX External causes of morbidity and mortality