Mortality Update



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A look back at 2024

The headline message is that overall mortality rates observed in England & Wales during 2024 were the lowest on record. They were just slightly below the previous lows observed in 2019, the last year before Covid 19 had such a dramatic impact on the statistics.

While the overall population mortality fell in 2024, a closer look at the underlying data shows a much more mixed picture. A particularly interesting feature to emerge from the Continuous Mortality Investigation's (CMI) analysis of the 2024 data has been the wide variation between the experience of different age groups within the population when compared with the 10 year average death rates observed between 2014 and 2023.

According to information published by the CMI, the 2024 mortality rates amongst younger adults have been adversely affected, whereas the opposite has been observed at higher ages. For example, in the 20-44 age group, mortality rates have been 2% higher than the 10 year average, while in the 75-84 age group, mortality rates in 2024 were 8% lower than the 10 year average. These variations between different age groups, coupled with the dramatic increase in mortality rates during the height of the pandemic in 2020 and 2021, make the projection of future trends in mortality rates challenging, to say the least!

It is also interesting to note that we were still seeing some deaths involving Covid 19 in 2024, with 10,000 registered in England & Wales. The trend is downwards, roughly halving every year with 17,000 Covid-related deaths registered in 2023 and 33,000 in 2022.

What about 2025?

So far, observed mortality in 2025 is slightly lower than up to the same date in 2024. For those who like to keep up to date with the progression of this year's mortality rates, the CMI publishes a series of regular mortality monitoring updates1.

Future projections

Every year the CMI publishes an updated version of their mortality projections model. Prior to the pandemic years, this annual update would typically include one year's extra data, reflecting the year just gone. However, if the death data in the years following the pandemic had been included, in the same way, it a was felt that it would have had a very significant and disproportionate impact on future projections. To try to address this, the CMI have considered various approaches to dealing with the data from the pandemic years; this has evolved as more postpandemic years' data became available. The approaches ranged from ignoring the data completely for the Covid years to taking a somewhat arbitrary proportion of it.

The difficulty was that no one knew what the long-term impact of the pandemic might be on mortality rates, so it was not clear how to model it.

The latest projection model, CMI_2024, was released on 30 June 2025 and includes a fundamental change in approach to the treatment of the data from the pandemic years.

Rather than disregarding or giving less weight to the pandemic years, the impact of Covid on death rates is modelled as a spike or "overlay" that starts in 2020 and gradually reduces with time, in a similar way to how the number of deaths attributed to Covid 19 has reduced over time. The starting point is that the impact of the overlay is reduced by half each year; however users of the model can change this half-life if that is felt to better fit their data. A longer half-life would lead to higher projected future mortality rates as the influence of Covid 19 would persist for longer.

Impact of these changes

The reflection of different rates of mortality improvement in different age groups makes a noticeable impact on the pattern of projected future mortality. Compared to last year's CMI_2023 projections, CMI_2024 projects a fall in mortality rates for the oldest people, but an increase for younger ones.

These changes correspond to higher life expectancies, and hence higher pension scheme liabilities, for say 80-year-olds, but lower liabilities for 40-year-olds. Therefore, if your pension scheme moves from CMI_2023 to CMI 2024 for its next funding calculations, the actual impact on the liabilities will depend on the age profile of the members. Schemes with a younger membership profile may see their liabilities reduce, whereas more mature schemes could well see an increase in their liabilities.

Other changes

mortality improvements between different age groups.



https://www.actuaries.org.uk/learn-and-develop/continuous-mortality-investigation/other-cmi-outputs/mo



