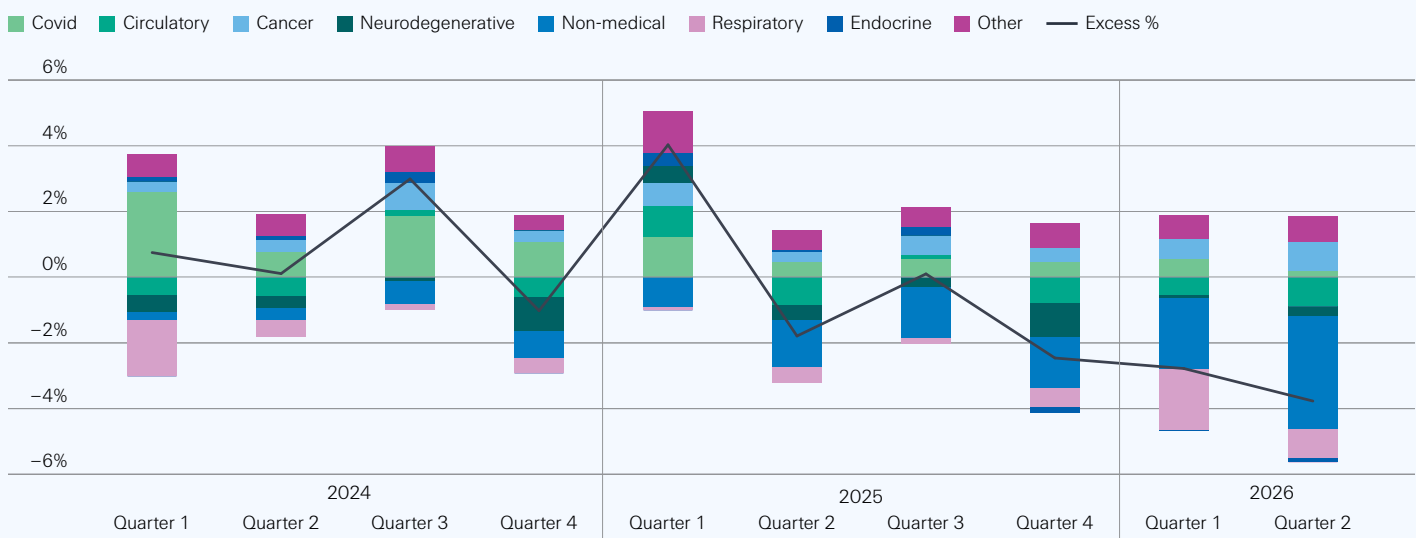


# US Life Mortality Trends

## US population excess mortality – all ages

Excess deaths as % of total projected by year/quarter – grouped causes of death | all ages



Source: CDC Wonder (data through June 6th) – excess determined by Swiss Re modeling which trends 2015-19 and adjusting for normal lags

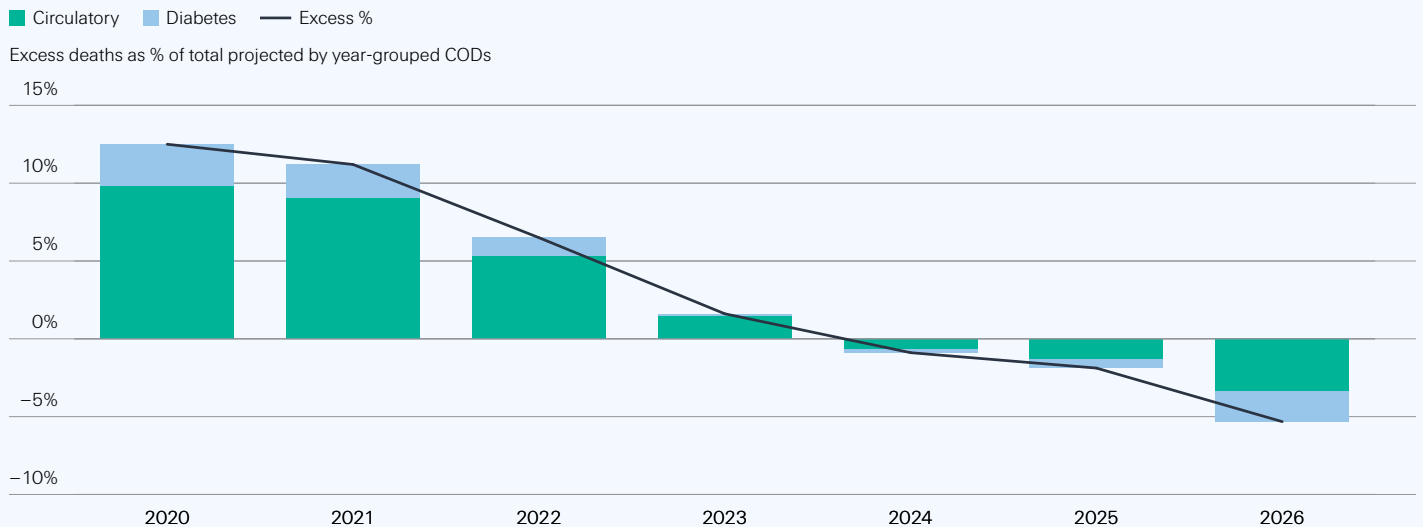
- The end of Q1 played out very favorably, which led to mortality ~3% below trend, while early Q2 mortality looks favorable as well.
- The rolling 4-quarter average is ~2% below trend, the lowest it's been since the start of the pandemic.
- Four of the last five quarters have been below trend, with non-medical (eg. drug) causes continuing to be the biggest contributor to reduced mortality.
- COVID hospitalizations remain at very low levels currently running 70%+ lower than last year (and over 50% lower over the entire season). Current wastewater levels are also running over 50% below last year's levels, which suggests that both incidence and severity are dropping.
- Younger age mortality (<65) continues to trend lower, providing an outsized contribution to favorable trends – driven largely by nonmedical (eg drug) deaths.
- Cancer continues to be a negative contributor to mortality in Q2, showing its highest level of excess mortality in the past few years.

### Q2 2026 Highlights

- Q2 is running 3–4% below trend. This could change with the remaining weeks left in the quarter and due to catch up from data lags after the Memorial Day holiday, which makes our IBNR adjustment less reliable.

## US Population Excess Mortality Ages < 65 – circulatory + diabetes

Mortality trends most closely linked to GLP-1 Usage

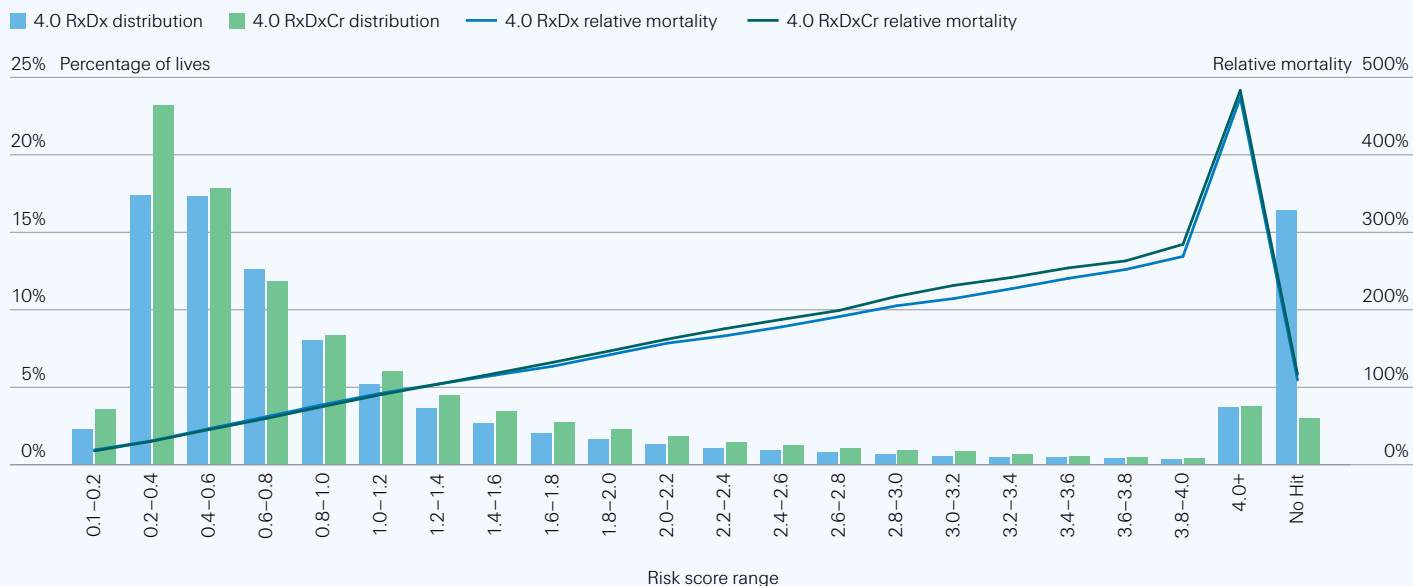


Source: CDC Wonder (data through June 6th) – excess determined by Swiss Re modeling which trends 2015-19 and adjusting for normal lags

- GLP-1s tend to have the largest impact at younger and middle ages, where drug treatments have the most favorable impacts at preventing early deaths. The graph above shows excess mortality for ages < 65 for just circulatory (heart, hypertension, stroke, and other) and diabetes deaths.
  - While other causes will most definitely be impacted by the use of GLP-1s, these causes were chosen because they will likely have the biggest benefit.
  - For reference the split of circulatory vs. diabetes deaths at these ages is approximately 85%/15%.
- Here are a few high-level observations:
  - During peak COVID years, excess mortality was elevated due to correlations and potential misidentification of COVID.
  - Since 2024, mortality in these areas has been favorable, with an acceleration in improvements happening over the past 6 to 12 months. These improvements align well with the increased usage of GLP-1s.
  - Diabetes mortality is improving at a faster rate than circulatory, which isn't surprising given GLP-1s more directly benefit diabetes mortality.
  - Older ages (65+) show similar trends, but to a lesser extent.
  - COVID deaths are more frequently being identified as circulatory deaths, working against the trends we're seeing. This is apparent when looking at recent COVID waves, which show a relatively higher spike in circulatory deaths than we saw in previous waves. This has a bigger impact at older ages.

## Milliman Risk Score 4.0 study

### Risk Score 4.0 RxDx and RxDxCr



Through our partnership with Milliman IntelliScript, we have been given access to their 2025 mortality study used to develop their latest Irix® Risk Score 4.0 model, spanning 60 million lives and 3.7 million deaths.

The chart above highlights two of the score versions available in their Risk Score suite: the Prescription Data and Medical Data model (RxDx) and the Prescription Data, Medical Data, and Credit Data model (RxDxCr). The vertical bars show how lives are distributed across score bands, while the lines reflect relative mortality within each band. As expected, both versions demonstrate strong mortality stratification, with clean, monotonic relationships, illustrating the model's ability to meaningfully differentiate risk.

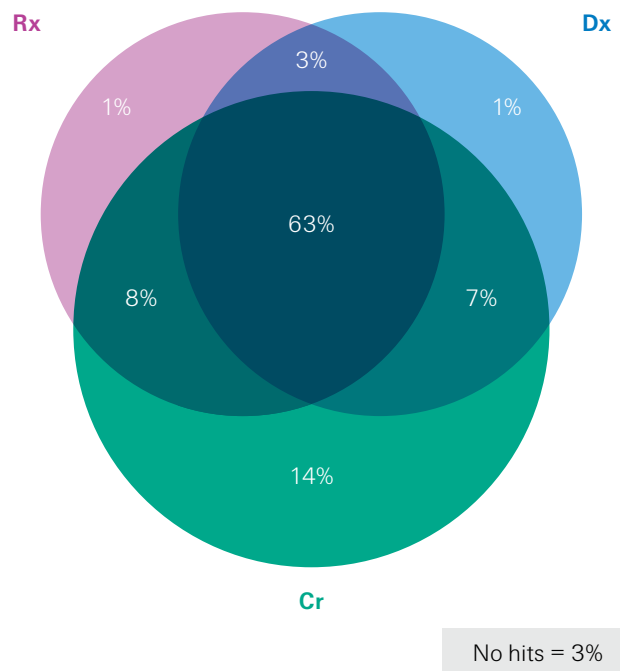
But the most interesting insights go well beyond the chart.

- **Improved accuracy** – Relative to version 3.0, Risk Score 4.0 exhibits lower relative mortality at low scores and higher relative mortality at high scores, highlighting enhanced predictability across the spectrum.
- **Segmentation across line of business** – We're analyzing differences across lines of business (including Life and Final Expense), an important consideration in ensuring relevance to specific use cases.

- **The age impact** – We're also studying how score distributions vary by age and what this means for cut point strategies, acceleration rates, and mortality impacts in A UW programs.
- **A new lens on tobacco** – For the first time, we have tobacco indications, allowing us to evaluate distributions and relative mortality with known tobacco users excluded. This creates a noticeable shift toward lower scores and opens the door for more refined cohort-specific strategies.
- **Credit continues to be a hot topic** – Adding Credit Data<sup>1</sup> (RxDxCr vs RxDx) consistently improves risk differentiation. Notably, for younger ages (<30) where Rx and Dx data can be thinner, Credit Data meaningfully enhances segmentation ability. In fact, it is more often than not observed to have a favorable impact, lowering the Risk Score.
- **Closing the "no-hit" gap** – 63% of lives have data across Rx, Dx, and Cr, while 14% rely on Credit Data alone (Rx & Dx no-hits). Rx and Dx hit rates continue to grow, but the RxDxCr model meaningfully expands score availability, reducing true no-hits to just 3%, a key lever for optimizing A UW throughput.

<sup>1</sup> Use of credit-based data should be evaluated within each company's risk management framework, underwriting philosophy, and in accordance with applicable regulatory requirements.

These findings raise important questions around cut point calibration, segmentation strategy, and model selection. Whether evaluating Risk Score 4.0 or other mortality models, Swiss Re can help translate these insights into action, optimizing AUW program design and unlocking additional straight-through processing.



If you're interested in how these dynamics could impact your portfolio, we'd welcome a deeper discussion.