









About this Bulletin

Welcome to the Newsflash, your monthly signpost to emerging research.

This complimentary digest highlights newly published peer-reviewed studies and key updates from public health and statistical agencies in the UK, US, and Canada, all selected for their relevance to the insurance and longevity sectors.

Rather than providing in-depth analysis, Newsflash is designed to guide you quickly and efficiently to valuable new material beyond the scope of our main bulletins, helping you stay informed and ahead of the curve.

Nicky Draper Director of Life and Health Consulting







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Newsletter Highlights

Journal updates - Summary

Using NHANES data, researchers found that a higher oxidative balance score, reflecting healthier antioxidant-prooxidant profiles, was associated with lower all-cause, cancer, and respiratory mortality, though links with cardiovascular mortality were weaker.

Updates from statistical bodies - Summary

Updated ACIP guidance for the 2025–26 U.S. influenza season revises vaccine formulations, expands age indications (e.g. Flublok now from ≥ 9 years), enables FluMist self- or caregiver administration, and recommends only thimerosal-free single-dose vaccines for all ages.









Cardiovascular 4





Global, regional and national burden of non-rheumatic degenerative mitral valve disease from 1990 to 2021: a systematic analysis based on the global burden of disease study 2021

Kong 2025

BMJ Open. 2025 Sep 14;15(9):e104086

To assess the global, regional and national burden of non-rheumatic degenerative mitral valve disease (nrDMVD) from 1990 to 2021 using data from the global burden of disease (GBD) Study 2021, focusing on trends in incidence, prevalence, mortality and disability-adjusted life-years (DALYs).



Non-rheumatic degenerative mitral valve disease

10.1136/bmjopen-2025-104086











Endocrinology 6



Excess mortality in type 1 diabetes patients in Belgium: A population based study

de Meester 2025 Diabetes Res Clin Pract. 2025 Oct:228:112426

The excess mortality and the life expectancy (LE) of adult patients with T1D living and receiving treatment in Belgium compared with the general population.



10.1016/j.diabres.2025.112426



Epidemiological study of thyroid cancer at global, regional, and national levels from 1990 to 2021: an analysis derived from the Global Burden of Disease Study 2021

Zhang 2025 Front Endocrinol (Lausanne). 2025 Aug 26:16:1644270

The long-term global trends in thyroid cancer and its epidemiological characteristics.



10.3389/fendo.2025.1644270









Longevity and Mortality &





Association of new Life's Essential 8 with biological aging among the national health and nutrition examination surveys

Chen X, Yin X, Chen X, Gao Y, Ye N, He X. Sci Rep. 2025 Aug 19;15(1):30311

The aim of this research was to evaluate the connection between LE8, the newly revised indicator of cardiovascular health, and the acceleration of biological age.



10.1038/s41598-024-80462-7



Long-term impacts of hurricanes on mortality among Medicare beneficiaries: evidence from Hurricane Sandy

Keenan 2025

Front Public Health. 2025 Aug 6:13:1523941

Mortality rates among older adults who continued living in ZIP Code Tabulation Areas (ZCTAs) impacted by flooding from Hurricane Sandy for up to 5 years after landfall.



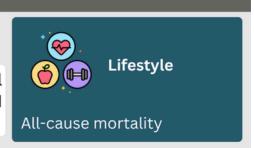
10.3389/fpubh.2025.1523941



Validating 8 Area-Based Measures of Social Risk for Predicting Health and Mortality

Limburg A, Rehkopf DH, Gladish N, Phillips RL, Udalova V. JAMA Health Forum. 2025 Aug 1;6(8):e252669

An evaluation of eight area-based indices tests how well measures of social risk can predict health outcomes and mortality.



10.1001/jamahealthforum.2025.2669











Longevity and Mortality





Comparative impact of social isolation on mortality in adults aged 40 years and above with versus without metabolic syndrome: evidence from two large cohorts in the U.S. and U.K.

Liu S, Lu C, You B, Guo Q, Liu T, Li Y. Popul Health Metr. 2025 Aug 25;23(1):50

This study explores how social isolation influences mortality risk differently in adults with and without metabolic syndrome, using data from large U.S. and U.K. cohorts.



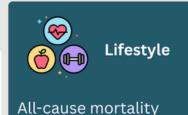
10.1186/s12963-025-00414-9



Association between oxidative balance score and mortality: Prospective cohort study in a representative US population

Ma S, Kong W. Medicine (Baltimore). 2025 Aug 15;104(33):e43932

Higher oxidative balance scores, reflecting healthier antioxidant–prooxidant profiles, are linked with lower mortality risk in a large U.S. cohort.



10.1097/MD.0000000000043932



Global, regional, national burden and trends of unintentional injuries from 1990 to 2021 and projections to 2035: a systematic analysis of the Global Burden of Disease study 2021

Qin 2025

Front Public Health. 2025 Sep 3:13:1653491

Utilizes data from the Global Burden of Disease database to investigate the burden of unintentional injuries spanning the period from 1990 to 2021.



Lifestyle

10.3389/fpubh.2025.1653491











Longevity and Mortality





Personality nuances and mortality risk: A coordinated analysis of four longitudinal samples

Stephan 2025

J Psychosom Res. 2025 Sep:196:112347. Epub 2025 Aug 9

Assessing whether the Big Five personality traits can predict mortlaity.



10.1016/j.jpsychores.2025.112347



Association between Hospital Frailty Risk Score and length of hospital stay, hospital mortality, and hospital costs for all adults in England: a nationally representative, retrospective, observational cohort study

Street 2025

Lancet Healthy Longev. 2025 Aug;6(8):100740

A nationwide English cohort study links higher Hospital Frailty Risk Scores with longer stays, greater mortality, and increased hospital costs.



10.1016/j.lanhl.2025.100740

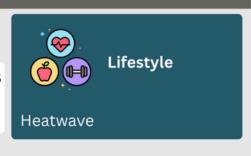


Mapping heatwave-related mortality across 2288 local communities in Australia: a nationwide time-series analysis

Xu 2025

Environ Int. 2025 Sep:203:109747. Epub 2025 Aug 23

To assess and map heatwave-related mortality burdens across Australia.



10.1016/j.envint.2025.109747











Longevity and Mortality





Digital exclusion and loneliness in older people: panel data analysis of three longitudinal cohort studies

Zhong S, Wang Y. BMC Geriatr. 2025 Aug 26;25(1):662

Fresh analysis of three longitudinal cohorts shows how digital exclusion may compound loneliness among older adults.



10.1186/s12877-025-06337-2



Association between age and malnutrition in oldest-old and centenarian populations

Zhu Q, Guan S, Li Q, Zheng Y, Wang X, Zhao Y, Zhu B, Ping P, Zhang Y, Fu S.

BMC Geriatr. 2025 Aug 23;25(1):656

Evidence from very old populations reveals a strong link between advancing age and higher risk of malnutrition.



10.1186/s12877-025-06259-z











Oncology 🐰





Analysis of global, regional, and national burden and attributable risk factors of acute lymphoblastic leukemia and acute myeloid leukemia from 1990 to 2021

Ni 2025

PLoS One. 2025 Sep 2;20(9):e0330479

Comprehensive GBD analysis charts global, regional, and national trends in acute lymphoblastic and acute myeloid leukemia, alongside their key risk factors, from 1990–2021.



10.1371/journal.pone.0330479. eCollection 2025



Increased mortality in patients with non-functioning pituitary tumors: a study in a tertiary center

Vargas-Ortega G, Ramírez-García EM, Balcázar-Hernández L, Rendón-Macias ME, Romero-Gameros CA, González-Virla B, López-Félix B, Zepeda E, Estrada-Estrada EM.

Front Endocrinol (Lausanne). 2025 Aug 4;16:1653376.

Patients with non-functioning pituitary tumors face elevated mortality risk, according to data from a tertiary care center. 10.3389/fendo.2025.1653376

Cancer Pituitary cancer



Global, regional and national epidemiology of acute myeloid leukemia (1990-2021): a statistical analysis of incidence, mortality, and DALYs

Wu 2025

Ann Med. 2025 Dec;57(1):2557507.Epub 2025 Sep 9.

Comprehensive analysis of the global, regional, and national epidemiology of acute myeloid leukemia (AML) from 1990 to 2021, focusing on incidence, mortality, and disability-adjusted life years (DALYs).

Cancer Acute myeloid leukemia

10.1080/07853890.2025.2557507











Oncology 🔍



Global burden and trends of multiple myeloma attributable to high body mass index: a comprehensive analysis of the global burden of disease 2021 study with projections to 2040

Xie Y, Li J, Yu J, Zhang J, Guo J. BMC Public Health. 2025 Aug 14;25(1):2774.

GBD 2021 data reveal the rising global burden of multiple myeloma linked to high BMI, with projections extending through 2040.



10.1186/s12889-025-24141-w



Global patterns and trends in cancer-related premature death and their impact on life expectancy across 185 countries: a population-based analysis

Xin-Sun 2025 Mil Med Res. 2025 Sep 3;12(1):56

The current burden and temporal trends in cancer-related premature deaths, and their impact on life expectancy at the global level.



10.1186/s40779-025-00645-9



Epidemiological study of thyroid cancer at global, regional, and national levels from 1990 to 2021: an analysis derived from the Global Burden of Disease Study 2021

Zhang 2025 Front Endocrinol (Lausanne). 2025 Aug 26:16:1644270

The long-term global trends in thyroid cancer and its epidemiological characteristics.



10.3389/fendo.2025.1644270













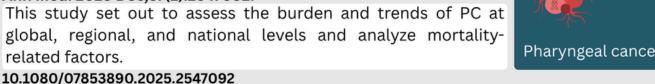


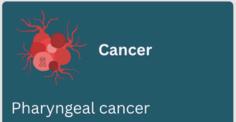
Incidence, mortality, and DALYs of global pharyngeal cancer: systematic analysis and projections Based on global burden of disease study 2021

Zhou T, Shen Y, Zhou E, Zhang J, Wang X, Song F, Xiao L, Xu C, Lu W, Ye H, Su K, Yi H, Huang W.

Ann Med. 2025 Dec;57(1):2547092.

This study set out to assess the burden and trends of PC at global, regional, and national levels and analyze mortalityrelated factors.





















Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2025–26 Influenza Season

The Advisory Committee on Immunization Practices makes influenza vaccination recommendations for each influenza season.



Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2025–26 Influenza Season | MMWR











Our Ethos

At Crystallise we seek to clarify decision-making from biomedical evidence. Whether you are a pharmaceutical executive, healthcare manager or an actuary, we deliver high quality, competitively priced biomedical evidence syntheses, analyses and models – quickly, reliably and efficiently.

Our Vision

Crystallising medical evidence to improve decision making.

Our Mission

To make the synthesis and analysis of biomedical evidence more efficient, objective and reliable.

Our Values

Inclusiveness

Social responsibility

Innovation

Integrity

Reliability

Our Ethical Principles

Integrity

Transparency and Disclosure

Social and Public Good Consideration

Respect for Privacy and Confidentiality

Avoiding Conflicts of Interest

Accountability and Professionalism

Probity

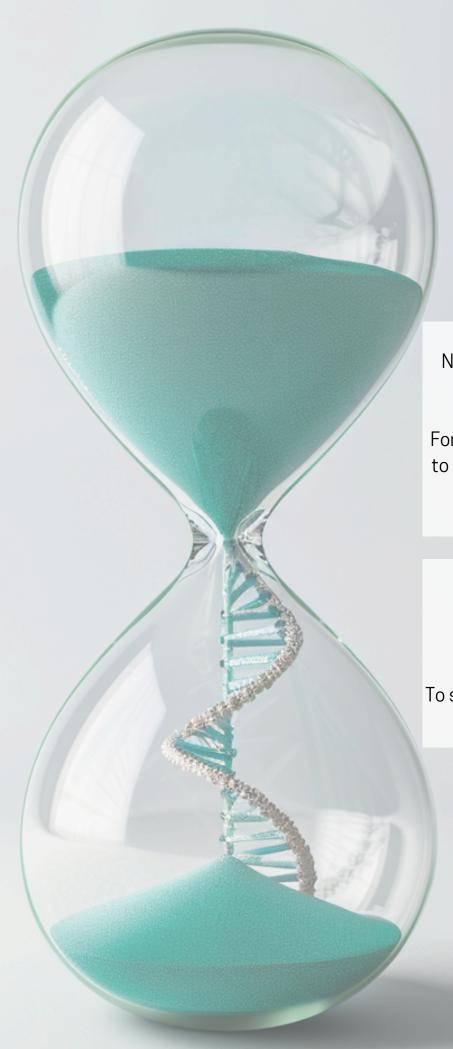
Justice

Honesty

Environmental Responsibility

Scientific and Methodological Rigour

Commitment to Continuous Ethical Reflection





Disclaimer:

No data analysis was performed in the studies included in this newsletter.

For further information, please subscribe to Longevity Perspectives by contacting Nicky Draper (nicky.draper@crystallise.com).

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