



### 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 - Highlights

This Global Burden of Diseases (GBD) analysis provides critical insights into the burden of colorectal cancer (CRC) linked to high BMI at global, regional, and national levels from 1990 to 2021.

#### Updates from statistical bodies - Highlights

A CDC update on MERS-CoV surveillance showing that whilst global reported MERS cases have declined substantially, continued MERS-CoV surveillance is important to maintaining MERS preparedness and response capabilities.

#### Updates from other health bodies - Highlights

A new study published by UKHSA shows some bacteria have already become resistant to one of the newest antibiotics introduced to the NHS.









## **Newsletter Highlights**

#### HTAngel highlights

The NHS have approved Deep Ensemble for Recognition of Malignancy (DERM, an artificial intelligence [AI] technology), which can be used in teledermatology services in the NHS to assess and triage skin lesions in adults referred to the urgent suspected skin cancer pathway.









### Cardiovascular 4

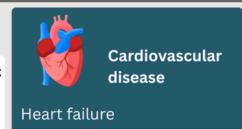




Widening gap in life expectancy between patients with heart failure living in most and least deprived areas: a longitudinal cohort study

Brown O BMC Med. 2025 May 28;23(1):303

The widening gap in life expectancy across the socioeconomic divide for those with heart failure in the UK.



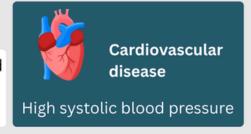
10.1186/s12916-025-04137-4



Trends in the global, regional, and national burden of cardiovascular diseases attributed to high systolic blood pressure from 1990 to 2021 and projections to 2045: a systematic analysis based on GBD 2021 data

#### Hu T BMC Cardiovasc Disord. 2025 May 21;25(1):390

A GBD analysis of trends in the burden of high systolic blood pressure and cardiovascular disease.



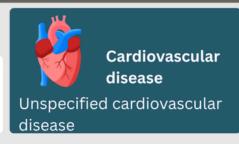
10.1186/s12872-025-04807-4



Global, regional, and national burden of cardiovascular diseases attributable to metabolic risks across all age groups from 1990 to 2021: an analysis of the 2021 global burden of disease study data

#### Zhu XY BMC Public Health. 2025 May 8;25(1):1704

A GBD analysis of the burden of metabolic risk factors and their association with cardiovascular disease risk.



10.1186/s12889-025-22702-7















Association between saturated and polyunsaturated fatty acid proportions in total fat intake and mortality risk: mediation by the neutrophil percentage-to-albumin ratio

#### Liu Y Lipids Health Dis. 2025 May 10;24(1):175

Evidence on the proportional composition of dietary fatty acids within total fat intake and the association with mortality.



10.1186/s12944-025-02592-9



Evolution of the US nonmetropolitan mortality disadvantage by sex, state, and year, 1999-2019

#### Paglino E

J Rural Health. 2025 Mar;41(2):e70040.

An overview of mortality rate discordance by metropolitan status in the US.



10.1111/jrh.70040



Physical resilience may offset mortality risks associated with genetic predisposition to shorter survival: A population-based cohort study

#### Stark L

J Gerontol A Biol Sci Med Sci. 2025 May 9

A review of the association between physical resilience (PR), and mortality that considers the additional impact of genetic predisposition.



10.1093/gerona/glaf101











### Longevity & Mortality



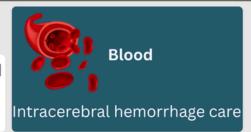


Two decades of trends in nontraumatic intracerebral hemorrhage care (ICH): A nationwide analysis

Loggini A

J Clin Neurosci. 2025 Jul:137:111300. Epub 2025 May 5.

Two decades of trends in mortality in ICH by background location in the US.



10.1016/j.jocn.2025.111300



Global, regional, and national burden of mortality and DALYs attributable to high body mass index from 1990 to 2021 with projections to 2036

Xie F

BMC Public Health. 2025 Jun 3;25(1):2053.

A GBD analysis of BMI and associated health burdens.



10.1186/s12889-025-23237-7



Global and regional disease burden of HIV/AIDS from 1990 to 2021 and projections to 2030

Lu Y

BMC Public Health. 2025 May 24;25(1):1928.

A GBD analysis of the HIV/AIDS disease burden by region.



10.1186/s12889-025-23121-4











### Longevity & Mortality





Global Burden and Trends of Acute Hepatitis C From 1990 to 2021: An Analysis Based on the 2021 Global Burden of Disease Study

Wang X J Viral Hepat. 2025 May;32(5)

A GBD analysis of acute hepatitis C burden, globally, and regionally.



10.1111/jvh.70026



Health inequalities in disease burden of dementia and early-onset dementia: findings from the Global Burden of Disease 2021 study

Du M Glob Health Res Policy. 2025 May 19;10(1):21

A GBD analysis of the global trends of dementia incidence, prevalence, and mortality.



10.1186/s41256-025-00417-x



Association of planetary health diet index with depression and mortality in the United States

Lan Y BMC Psychiatry. 2025 May 30;25(1):556

The association between PHDI dietary patterns and risk of both depression and all-cause mortality.



10.1186/s12888-025-06987-x











# Oncology 🐰



Global, regional, and national burden of laryngeal cancer attributable to (LCAS) smoking, 1990-2021, and projections to 2036: a systematic analysis of the Global Burden of Disease study 2021.

Shi L Front Public Health. 2025 May 9;13:1583045

A GBD analysis of the burden and future trends in smoker driven laryngeal cancer.



10.3389/fpubh.2025.1583045



Global, regional, and national burden of breast cancer in young women from 1990 to 2021: findings from the global burden of disease study 2021

Wang W BMC Cancer. 2025 Jun 6;25(1):1015.

A GBD analysis of breast cancer by region and country.



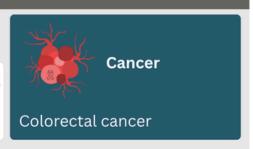
10.1186/s12885-025-14416-1



Worldwide burden and cross-regional health inequalities of high BMI-attributable colorectal cancer by gender from 1990 to 2021, with predictions through 2041.

Zhang J BMC Gastroenterol. 2025 May 20;25(1):386.

The global burden of CRC attributable to high BMI highlighting regional and national variability.



10.1186/s12876-025-03938-4











# Oncology 🐰



Burden of colorectal cancer attributable to high body-mass index in 204 countries and territories, 1990-2021: Results from the Global Burden of Disease Study 2021

Zhang Q Public Health. 2025 May;242:388-398

A GBD analysis of the burden of CRC linked to high BMI at global, regional, and national levels from 1990 to 2021.



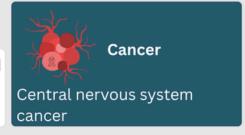
10.1016/j.puhe.2025.02.040



Global, regional, and national burden of brain and central nervous system cancer: a systematic analysis of incidence, deaths, and DALYS with predictions to 2040

Zhang Q Int J Surg. 2025 Jun 1;111(6):4033-4038. Epub 2025 Apr 1.

A GBD analysis regional, and national burden of brain and central nervous system cancer.



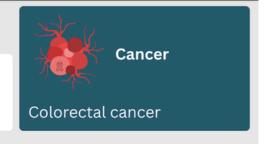
10.1097/JS9.0000000000002359



Global burden of colon and rectal cancer and attributable risk factors in 204 countries and territories from 1990 to 2021

Zhang X BMC Gastroenterol. 2025 May 2;25(1):332

A GBD analysis of the global burden of colorectal cancer.



10.1186/s12876-025-03948-2













## Respiratory &



Update on the Epidemiology of Middle East Respiratory Syndrome Coronavirus — Worldwide, 2017–2023

Though global reported MERS cases have declined substantially, continued MERS-CoV surveillance is important to maintaining MERS preparedness and response capabilities.



Update on the Epidemiology of Middle East Respiratory Syndrome



West Nile Virus and Other Nationally Notifiable Arboviral Diseases — United States, 2023

This report provides an annual update on arboviral disease case numbers and incidence and increase awareness of the seasonal and geographic occurrence and characteristics of arboviral diseases in the United States



https://www.cdc.gov/mmwr/volumes/74/wr/mm7421a1.htm?









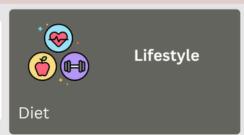
### Other Health bodies





### National Diet and Nutrition Survey 2019 to 2023: report

The National Diet and Nutrition Survey (NDNS) is designed to assess the diet, nutrient intake and nutritional status of the general UK population. This report presents data for 2019 to 2023.



https://www.gov.uk/government/statistics/national-diet-and-nutrition-survey-









### Other Health bodies

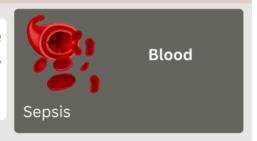
## Longevity & Mortality





#### Resistance emerges to newest antibiotic

A new study published by UKHSA shows some bacteria have already become resistant to one of the newest antibiotics introduced to the NHS.



Resistance emerges to newest antibiotic - GOV.UK



### UKHSA publishes new analysis of health inequalities in England

Those from poorer communities are disproportionately effected by infectious diseases.



UKHSA publishes new analysis of health inequalities in England - GOV.UK



#### First detection of West Nile virus in UK mosquitoes

A research programme by the UK Health Security Agency (UKHSA) and the Animal and Plant Health Agency (APHA) has identified fragments of West Nile Virus (WNV) genetic material in mosquitoes collected in Britain for the first time.



First detection of West Nile virus in UK mosquitoes - GOV.UK











### Other Health bodies

## Longevity & Mortality





### Flu vaccine prevented around 100,000 hospital admissions

New data published by the UK Health Security Agency (UKHSA) shows that the flu vaccine is estimated to have prevented around 96,000 to 120,200 people from being hospitalised in England last winter.



Flu vaccine prevented around 100,000 hospital admissions - GOV.UK



### Recent mortality trends in England

This report provides recent and long-term trends in mortality in England by sex, age and cause of death, including provisional data for 2024.

Other

All cause mortality

https://fingertips.phe.org.uk/documents/recentmortalitytrendsinengland.htm











## **New Drug Approvals**





# England NICE HTE24

Al technologies for assessing and triaging skin lesions referred to the urgent suspected skin cancer pathway



https://www.nice.org.uk/guidance/hte24









### **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** 

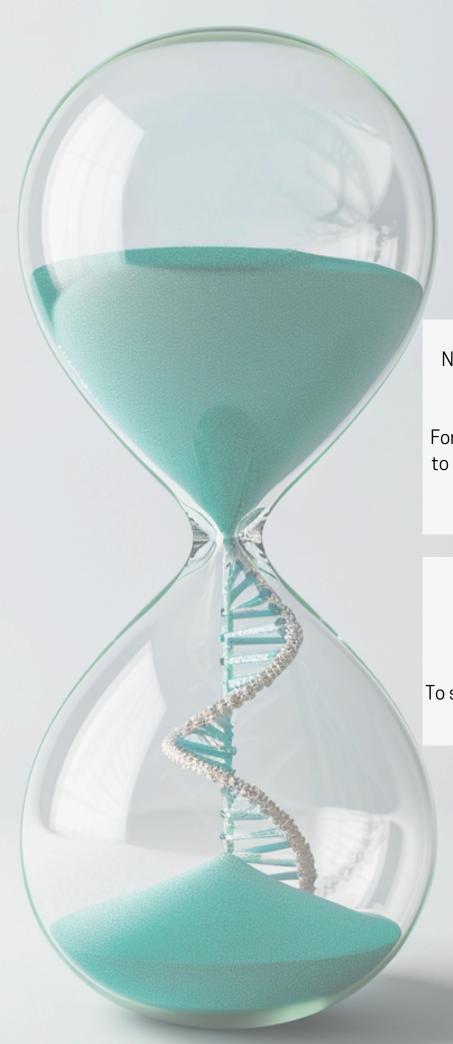
**Justice** 

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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