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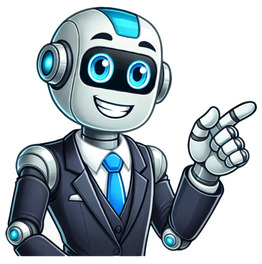

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(October 24, 2024). Life expectancy of men at birth in the United States from 2011 to 2022 [Graph]. In Statista. Retrieved May 27, 2025, from Bank. "Life expectancy of men at birth in the United States from 2011 to 2022." Chart. October 24, 2024. Statista. Accessed May 27, 2025. Bank. (2024). Life expectancy of men at birth in the United States from 2011 to 2022. Statista. Statista Inc.. Accessed: May 27, 2025. Bank. "Life Expectancy of Men at Birth in The United States from 2011 to 2022." Statista, Statista Inc., 24 Oct 2024, Bank, Life expectancy of men at birth in the United States from 2011 to 2022 Statista, (last visited May 27, 2025)Life expectancy of men at birth in the United States from 2011 to 2022 [Graph], World Bank, October 24, 2024. [Online]. Available: By Tim Lambert We do not know exactly what average life expectancy at birth was in the past (before the 19th century we can only give rough estimates). However, historians think it was about 35 years in the Middle Ages or the 16th Century. However, that does not mean that people died when they reached 35! The average life expectancy was around 35 but a great many of the people born died in childhood. We don’t know exactly what percentage died but if we say about 25% of people died before they were 5 years old we are probably not wide of the mark. Perhaps as many as 40% died before they reached adulthood. However, if you could survive childhood and your teenage years you had a good chance of living to your 50s or your early 60s, and even in the Middle Ages in Western Europe, some people lived to 70 or 80. Things improved in the 18th century in Britain. Life expectancy at birth rose to about 40 by the late 18th century. Nobody is sure why. The plague died out, which must have helped. (The last outbreak of plague in Western Europe was in Marseilles in 1720). Furthermore in the 18th century eating potatoes became common, which probably improved nutrition. Improvements in 18th-century agriculture may also have helped. Life expectancy rose further in Britain in the late 19th century. By 1900 in Britain, it was about 47 for a man and about 50 for a woman. (That does not mean of course that people dropped dead in their late forties. The figures are skewed because death in childhood was still common in the early 20th century. That affected the average figure.) During the late 19th century living standards rose substantially and most people were better nourished. There were also huge improvements in public health with sewers being dug under cities and clean water supplies created. Things continued to improve in Britain in the early 20th century. In particular death in childhood became far less common and by the early 1930s life expectancy for a man at birth was about 60. By the 1950s it had risen to about 65. Things improved more slowly in the late 20th century but by 1971 life expectancy for a man in Britain was 68. For a woman, it was 72. In 2015 life expectancy was 79 for a man in the UK and 83 for a woman. Last revised 2024 The life expectancy of men in the U.S. is nearly six years shorter than that of women, according to new research published on Monday in JAMA Internal Medicine. At least partially as a consequence of over 1 million Covid-19 deaths, life expectancy in the U.S. has declined significantly over the past few years, falling from 78.8 years in 2019 to 77 in 2020 and 76.1 in 2022 — undoing over two decades of progress. This puts the country far behind its wealthy peers: Countries such as Japan, Korea, Portugal, the U.K., and Italy all enjoy a life expectancy of 80 years or more. Countries such as Turkey (78.6) and China (78.2) also fare better. This falloff has become a key issue for the Food and Drug Administration. The picture is especially concerning for men, whose life expectancy is now 73.2 years, compared with women’s 79.1. This 5.9 year gap is the widest between the two genders since 1996. “Across the world, women tend to live longer than men,” said Brandon Yan, a resident physician at the UCSF School of Medicine and a research collaborator at the Harvard T.H. Chan School of Public Health, who is the lead author of the study. (Both institutions collaborated in the research.) But the widening gap should concern the U.S., Yan said, because it shows that baseline factors accounting for men’s lower longevity — genetics, men’s higher vulnerability to chronic disease — aren’t the sole reason for the difference in life expectancies. “The opioid epidemic, mental health, and chronic metabolic disease are certainly front and center in the data that we see here, explaining why there’s this widening life expectancy gap by gender, as well as the overall drop in life expectancy,” said Yan. Men have higher mortality rates from all three conditions compared to women. In addition, Yan notes, “a lot of these drivers of worsening life expectancy in particular for men are preventable causes of death.” Even Covid-19 could be considered a preventable cause of death in the time since vaccines have become available, he said. The decline in life expectancy in the U.S. suggests that advancements in medical treatment are no longer sufficient to counter ongoing public health crises, Yan said. “We have a health care system that is very advanced in treating illnesses and advanced disease. But for the most part … it is not very good when it comes to preventative care.” In the years leading to 2010, it was public health improvements — such as aggressive anti-smoking campaigns and the consequent reduction of deaths from respiratory illnesses and cancer — that led to the increased longevity and a reduced male-female gap in life expectancy. The reasons that issues such as suicide or opioid overdose affect men more than women are complex. “There’s a substantial socio-cultural norms component to this data as well in terms of the ways that society views masculinity and the way that men ought to behave,” said Yan. “That has profound effects on care-seeking behaviors,” he said. Whether a man seeks care for mental health issues, for instance, or even goes to routine primary care visits and takes medications, may be impacted by ideas about masculinity. The analysis doesn’t provide insight into racial and ethnic differences. Yan says it is an area he and his colleagues plan to explore further. “We know that the disparity at baseline between men and women is much higher for Black Americans than it is for white Americans, for instance. And the interplay between gender and race is an important area for further study,” he said. As of 2022, the life expectancy for African American men was 61.5, nearly eight years shorter than for African American women. A History of Corporal Punishment A History of New York City A History of Underwear5 April 2021By Tim Lambert Early Underwear The ancient Egyptians sometimes wore loincloths. The Romans also wore underwear. Both Roman men and women wore a loincloth or shorts called a subligaculum. Women also wore a band of cloth or leather around their chest called a strophium. During the Middle Ages, men wore linen shorts called braies, but… Continue reading A History of Underwear A Short History of Scotland14 March 2021By Tim Lambert Ancient Scotland During the ice age, Scotland was uninhabited. However, when the ice melted forests spread across Scotland, and stone-age hunters moved there. By 6,000 BC small groups of people lived in Scotland by hunting animals like red deer and seals and by gathering plants for food. Then about 4,500 BC farming… Continue reading A Short History of Scotland Female Rulers in History14 March 2021By Tim Lambert Women Rulers in the Ancient World Kubaba Kubaba is the first recorded female ruler in history. She was the queen of Sumer, in what is now Iraq about 2,400 BC. Sobekneferu Sobekneferu was ruler of Egypt around 1800 BC Hatshepsut Hatshepsut was a ruler of Egypt. She was born about 1508 BC… Continue reading Female Rulers in History A Brief History of Drinks14 March 2021By Tim Lambert Early Drinks The original drink was, of course, water or Adam’s ale as it is sometimes called. However, when people invented farming they invented other drinks. It is believed that beer was invented before writing. Certainly in Egypt, beer was a common drink. People drank it from large containers through straws (to… Continue reading A Brief History of Drinks A History of Education14 March 2021By Tim Lambert Education in Ancient Egypt Most children in Egypt did not go to school. Instead, boys learned farming or other trades from their fathers. Girls learned sewing, cooking, and other skills from their mothers. Boys from wealthy families sometimes learned to be scribes. They learned by copying and memorizing, and discipline was strict.… Continue reading A History of Education Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. The human lifespan is the maximum number of years an individual from the human species can live based on observed examples. Though this definition of lifespan may seem simple enough, it is often confused with other common concepts in the study of the aging, life, and death of living organisms. In order to better understand the human lifespan, let's dive a little deeper into the concept and its important distinctions from other commonly used terms. Sollina Images / Getty Images The term lifespan is most commonly confused with another important concept: life expectancy. While both terms relate to the number of living years, they actually define very different concepts. While the term lifespan refers to the maximum number of years an individual can live, life expectancy refers to an estimate or an average number of years a person can expect to live. Most simply put, life expectancy can be attributed to and impacted by an individual and their personal health history, genetics, and lifestyle, whereas lifespan holds for all living humans. For example, a person's life expectancy is affected by personal factors like family history, environment, diet, and even age and sex. One person's life expectancy might be different from your life expectancy and it may even change over time. Your life spans, however, are one in the same. We all share it as members of the same species. So what is the human life span? Given that the human lifespan is defined by the longest observed human life from birth to death, it is a figure that has changed over the years. For humans, the current accepted maximum lifespan is 122 years. This age was achieved by Jeane Louise Calment of France. Calment lived from February 21, 1875, to August 4, 1997, until she was exactly 122 years and 164 days old. Remarkably, Calment remained relatively healthy and mentally intact until her 122nd birthday. Though there have certainly been claims of longer lives, none of the claims were acceptably documented and verified. In 2019, the United States' average life expectancy was around 79 years, which is still forty-four years younger than the human lifespan. U.S. life expectancy dipped with the COVID-19 pandemic and was 76.4 in 2021 and 77.5 in 2022. So how do we close that gap and elongate our lives? There will always be factors that are out of our individual control like our inherited genes, but we shouldn't discount the impact of those that we can control. It is generally understood that closing the gap between life expectancy and lifespan can be done through healthier living, less exposure to toxins, the prevention of chronic illnesses, and a little bit of luck. The global life expectancy at birth for women is 75 years old and for men, it’s 70 years old. However, in America, the average life expectancy for women is 81 years and for men 77 years.In this definitive guide, we explore all the latest lifespan statistics by state, gender, ethnicity, and income to summarize the current climate of life expectancy.This data could also be used in figuring out who are the best life insurance companies based on things like the average life expectancy of their customers based on the state they live in. US Life Expectancy at BirthAverage Life Expectancy in the US TodayLife expectancy at birth definitionThe phrase ‘life expectancy at birth’ indicates the lifespan in years of a newborn child if all current mortality factors such as disease, remain the same through its entire life. Unless specified, all American lifespan expectancy figures on this page are ‘at birth’ as a standard.In this section we coverWhat Is The Average Life Expectancy At Birth In The US?The average lifespan at birth figures in the US, these are the most up to date available from the OECD, CIA, and CDC.Latest US Average Life Expectancy At Birth Figures:80.0 Years: Central Intelligence Agency (CIA).78.6 Years: Centers for Disease Control and Prevention (CDC).78.5 Years: Organization for Economic Co-operation and Development (OECD).* Latest available data is from 2017 | ** Latest available data is from 2016There were a total of 2,813,503 resident deaths recorded in 2017, an increase of 69,255 from the previous year. Life expectancy is essentially a snapshot of any populations overall health. Based on the latest OECD figures (a collection of developed nations), the United States falls behind the member countries average lifespan by 1.9 years.So What Does the Age Adjusted Death Rate Change of 2016-2017 Look Like?Age groups 25-44 death rates increased significantly.People aged 85 and over also saw increased death rates.Age groups 45-54 decreased in death rates.Non-Hispanic white males and females also increased.Where Does The US Rank In Global Life Expectancy?America is ranked 43rd out of 224 countries out of CIA’s World Factbook at 80 years.Monaco leads with 89.4 years, followed by Japan (85.3) and Singapore (85.2).The CIA data for average expectancy of life is considerably higher than in other studies. Additionally, it is worth mentioning that the percentage of developed nations that were classified as high income within this list are low. The Organization for Economic Co-operation and Development (OECD) shows a good outline of where the United States rests out of 44 developed nations. Countries like Canada, Australia, and the majority of western European counties all rank above the US average of 78.5 years. In fact, there are 18 countries where the residents can expect to live 3 years longer and 25 countries with average lifespans over 80 years.US Ranked 29/44: In the OECD’s developed nation members.US is 1.9 years lower than the OECD’s average life expectancy of 80.5.What Is The Life Expectancy Of An American Male Or Female?Gender Specific Figures:Male: 76.1 years - Average life expectancy of a US male (at birth).Female: 81.1 years - Average life expectancy of a US female (at birth).5.0-year difference between average US female and male lifespan expectancy.Latest available data is from 2017 - OECDIn almost every country in the world, women outlive men and the US is no exception. Women in the US live longer than men by 5 years, according to data from the Organization for Economic Co-operation and Development (OECD). The main change between the previous year’s data is in the lifespan of younger American males, increasing female’s gap by 0.1 years. Over 65 life expectancy data remained the same:Male over 65: lifespan expectancy is 18.1 years.Female over 65: lifespan expectancy is 20.6 years.Latest available data is from 2017 - OECDWhich U.S. Ethnic Group Has The Longest Life Expectancy?Gender Specific Figures:86.5 years - Asian-American82.8 years - Latino78.9 years - White76.9 years - Native American74.6 years - African-American\Latest available data is from 2017 - OECDAccording to the latest Centers for Disease Control and Prevention (CDC) data, there was an 11.9-year gap between Asian American and African American residents from 2016-2017. The ethnic groups with lower life expectancy had higher death rates from heart disease and other common mortality factors detailed below.The 11.9-year gap between Asian American and African American life expectancy.60% of the deaths in the gap were from heart disease, cancer, homicide, diabetes, and mental health conditions.African-Americans in the US are more likely to die from heart diseaseWhite-Americans suicide rates are twice as likely than African-AmericansLatest available data is from 2017 - OECDSOURCE REFERENCES[1] OECD LE at birth data[2] CDC Mortality in the United States[3] CIA world book[4] The Lancet, Forecasting life expectancyIn this section we coverWhat Is The Average Americans Lifespan Over Time? (1960-2017)Using data from the World Bank and Organization for Economic Co-operation and Development (OECD), we’ve mapped the United States average life expectancy at birth from 1960 to 2017 (being the latest date published).Current US life expectancy figures match 2010 (78.6 years)Since 1960, US life expectancy has risen 8.7 yearsThis could be the first decade the US sees zero increaseOn average, age of death averages have increased each decade. However, recent declines have placed the latest figures in 2017 matching that of 2010 meaning we’ll be entering 2020 with the lowest 10 year increase since the 19th century.DatesLife Expectancy (Yrs)Increase (Yrs)2010-201778.6 - 78.602000-201076.7 - 78.61.91990-200075.3 - 76.71.41980-199073.7 - 75.31.61970-198070.9 - 73.72.81960-197069.9 - 70.91Why Has The US Had The Longest Sustained Lifespan Decline In Over A Century?2014-2015 – Figures declined from 78.9 to 78.72015-2016 – Figures declined from 78.7 to 78.62016-2017 – Figures declined from 78.6 to 78.6**CDC recorded this as a drop by decimal points; this figure was not disclosedSince 2010, like in many countries across the world, life expectancy is steadily increasing for the United States. However, according to the Centers for Disease Control and Prevention (CDC) and many other sources, it hit a peak in 2014 and has been on a downward trend since.2014-2017 was the longest sustained decline in expected lifespan in a centuryThe United States hasn’t declined in expected lifespan for over 2 decadesThe last decline recorded was 1992-1993, dropping 75.8 to 75.5 yearsThe 2014-2017 drop in the United States life expectancy is the longest sustained downward trend since 1915-1918, where figures were impacted by World War I and an influenza pandemic.Projected American Life Expectancy Figures For 2030Male US life expectancy is projected to increase 76.1 to 79.51 years by 2030Female US life expectancy is projected to increase 81.1 to 83.32 years by 2030Studies from the World Health Organization and Imperial College London suggest life expectancy at birth is set to increase significantly in many developed countries by 2030. Countries like Japan and Monaco currently have the highest rates; however, according to this research, France and South Korea are expected to surpass them in the rankings. Furthermore, South Korean women will pass the average age of death expectancy of 90 years for the first time for any country.By 2040: According to a new report from the Institute for Health Metrics and Evaluation, the United States is expected to decline in these rankings by 2040. They reviewed their data against the CIA World Factbook data, and it showed an expected decline of 21 spots.The US to drop 21 places in global life expectancy ranking by 2040 (64th)The US currently ranks 43rd place in the world life expectancy (CIA)The underlying reasons the US is set to fall behind are:Lack of universal health insuranceRaising obesity levels and correlating diseasesHigher rates of child mortalityWhat’s the pattern? In contrast, countries with lower mortality rates share excellent healthcare, low obesity rates, better nutritional diets, and fewer smokers. Of course, this is not pre-ordained, and there is ample time for these projected trajectories to alter their path.SOURCE REFERENCESThese links will jump you to the bottom of the page with the references URL's.[1] OECD LE at birth data[5] The World Bank LE at birth data[6] CDC national health statistics[7] Statista US LE in 2030US Disease Health ImpactsWhat Is Causing The Decline In Us LifetimeIn this section we coverTop 10 Causes In The Average US Life Expectancy Decline*Overdoses are included in the ‘unintentional injuries’ categoryHeart disease and cancer each cause 4x as many deaths as all other leading causesNationwide, 70,237 people died following a drug overdose in 2017, a 9.6-percent increase over 2016.Suicides took 45,808 lives in 201742,000 died from opioid overdoses in 2017The ranking of the top 10 causes of mortality in the US remained the same from 2016 to 2017. The main areas of change came from age-adjusted death rates in suicide, unintentional injuries, diabetes, and pneumonia and influenza.We see increases in deaths from obesity, substance abuse, and despair; in fact, the decline in the nation’s emotional well-being has been enough to drag down America’s average length of life.The 3 Core Areas Of Change That Caused America’s Lifespan DecayThe percentage of the USA population that is obese shows a steady increase. Some thought-provoking statistics include:The United States had a 40.59% obesity rate in 2017.Projected obesity set to rise to 46.6% in the next 10 years (almost half the population)Obesity rates rose from 37.06% to 40.59% between 2014-2017US is the highest out of OECD’s 44 developed nations, 5.6% ahead of Chile at #2The average OECD developed nations obesity rate is 19.5%The lowest OECD developed nations obesity rate is Japan at 4.2%In essence, obesity is the leading factor in the decline in America’s average length of life due to its intertwined relationship with leading mortality issues. Some interesting statistics on this include:57.9% of the calories eaten by Americans come from ultra-processed foodsOnly 30% come from fresh foods2 out of 5 of Americans over the age of 20 are obeseBeing 40lbs overweight cuts 3 years of life expectancyBeing 100lbs overweight reduces lifespan by 10 yearsUSA overdose rates show huge increases in deaths from 2014-2017, particularly in males aged 25-54.Overdose deaths per 100,000 increased from 13.8 to 21.7 between 2014-2017In 2017, there were 70,237 drug overdose deaths in the United States.The rate of drug overdose deaths in 2017 was 9.6% higher than the rate in 2016.Adults aged 25–54 had higher rates of drug overdose deaths in 2017In 2017, the states with the highest drug overdose death rates were:West Virginia (57.8 per 100,000)Ohio (46.3 per 100,000)Pennsylvania (44.3 per 100,000)District of Columbia (44.0 per 100,000)One of the leading factors is the increase deaths from synthetic opioid overdoses such as fentanyl analogs, fentanyl, and tramadol.Drug overdose deaths involving synthetic opioids increased by 45% in 2016-20172017 - 70,237 overdose deaths, 47,600 by opioid (67.77%)2007 - 36,010 overdose deaths, 18,515 by opioid (51.41%)1999 - 16,849 overdose deaths, 8,048 by opioid (47.76%)Above, the USA suicide rates over time chart shows the steady increase in suicide deaths per 100,000 population.Suicide deaths per 100,000 increased from 13 to 14 between 2014-2017Suicide rate increased 33% from 1999-2017 - 10.5 to 14.0 per 100,000.In 2017, the suicide rate in rural counties was 1.8 times more than most urban countiesSuicide deaths per 100,000 for males are up 22.22% per from 1999-2017Suicide deaths per 100,000 for females are up 27.27% per from 1999-2017It’s clear from the data that suicide rates among men are almost 4 times higher than women. However, a study recently published by the JAMA Network Open found that the gap is narrowing in some age groups. Researchers discovered that suicides among girls 10 to 14 years of age have risen by 13% since 2007. Whereas the same age group for boys increased by 7% in the same period.Confronting these issues is going to be a huge undertaking, they’re multifaceted problems that require in-depth investigation and are often complex due to economic involvement. It is clear that if we want Americans to climb the rankings and live long lives like other prosperous developed countries, change is needed.Why Has The US Had The Longest Sustained Lifespan Decline In Over A Century?2014-2015 – Figures declined from 78.9 to 78.72015-2016 – Figures declined from 78.7 to 78.62016-2017 – Figures declined from 78.6 to 78.6**CDC recorded this as a drop by decimal points; this figure was not disclosedSince 2010, like in many countries across the world, life expectancy is steadily increasing for the United States. However, according to the Centers for Disease Control and Prevention (CDC) and many other sources, it hit a peak in 2014 and has been on a downward trend since.2014-2017 was the longest sustained decline in expected lifespan in a centuryThe United States hasn’t declined in expected lifespan for over 2 decadesThe last decline recorded was 1992-1993, dropping 75.8 to 75.5 yearsThe 2014-2017 drop in the United States life expectancy is the longest sustained downward trend since 1915-1918, where figures were impacted by World War I and an influenza pandemic.SOURCE REFERENCESThese links will jump you to the bottom of the page with the references URL's.[2] CDC Mortality in the United States[8] OECD obesity update[9] CDC Drug Overdose Deaths in the United States[10] CDC Suicide Mortality in the United StatesSome Americans Don't Have Health CoveragePercent Of U.S. States Without Health InsuranceThe number of uninsured Americans has gone up 7 million without solid health insurance coverage under TrumpUnited States uninsured rate was 10.9% in 2016 to 13.7% in 2018The critical areas for the decline are in lower income and younger Americans1 in 6 people in Texas doesn’t have health coverage (17.1%)Compared with 1 in 36 people in Massachusetts doesn’t have health coverage (2.8%)The expected lifespan of the average American is a glimpse into the nation’s health as a whole. This sobering data highlights one of the issues mentioned previously, the countries with lower mortality rates share excellent healthcare.Top 5 US states with the best / worst health insurance coverage percentages:Top 5 States% No CoverMassachusetts2.8%District of Columbia3.8%Vermont3.8%Hawaii4%Minnesota4.5%Bottom 5 States% No CoverTexas17.1%Alaska14.9%Oklahoma13.9%Georgia13.9%Florida13.3%Why are uninsured rates increasing with Obamacare still active?Obamacare premiums have been on the rise.Enrollment and outreach funding for Obamacare has been slashed drastically.Under Trump, some states now require you to work to get health coverage.Some Americans believe Obamacare was revoked.SOURCE REFERENCESThese links will jump you to the bottom of the page with the references URL's.[11] Measure of America - Uninsured US states[12] VOX uninsured AmericaLife Expectancy In Us By StateWhich States Have The Lowest Average Life Expectancy?Hawaii is the state with the highest life expectancy at birth being 81.5 yearsWomen in Hawaii are the longest living Americans, at 84.3 yearsMen in Mississippi have the lowest expectancy of life in any state, at 71.4 yearsCompared to Hawaii, there are only 20 countries that have a higher life expectancy Americans living in much of the South lead shorter lives than the rest of the country.We know from looking at the global figures earlier that health and lifespan expectancy can be drastically dissimilar geographically. In the US, you can expect to live very different timescales depending on the state and county you reside in.Top 5 StatesAverage Life Expectancy1). Hawaii81.52). California81.03). Minnesota80.84). New York80.75). Connecticut80.6Bottom 5 StatesAverage Life Expectancy1). Mississippi74.62). West Virginia74.93). Alabama74.94). Kentucky75.15). Arkansas75.4If you live in Hawaii, you can expect to live 6.9 years longer than if you lived in Mississippi, which range increases to 7.3 years for males.Longest to shortest US life expectancy at birth states (Hawaii > Mississippi):US Average: 6.9-year expectancy of life difference by US state (74.6 - 81.5)US Male Average: 7.3-year expectancy of life difference by US state (71.4 – 78.7)US Female Average: 6.6-year expectancy of life difference by US state (77.7 – 84.3)SOURCE REFERENCESThese links will jump you to the bottom of the page with the references URL's.[13] IHME country profilesUS States Vs CountriesComparing State Specific Life Expectancy GloballyThere’s a 6.9-year difference between living in Mississippi and Hawaii - We decided to investigate deeper into the disparity between states in terms of how long people live. We compared the countries in the CIA’s global life expectancy report to US states, revealing where your lifespan at birth is on a global scale.Comparing states to countries enables us to visualize the huge discrepancy in expectancy of life when compared to the global rankings. People living in Mississippi, the lowest state, have the same average lifespan as Montserrat (74.6 years), ranked 122 out of 224 countries. Whereas, residents of Hawaii live as long as people from Anguilla (81.5), the country with the 24th longest lifespan expectancy globally.Highest StatesHawaii comes in at 81.5 years, matching Anguilla, ranked 24/224 countriesCalifornia comes in at 81.0 years, matching Finland, ranked 31/224 countriesMinnesota comes in at 80.8 years, matching the UK, ranked 35/224 countriesNew York comes in at 80.7 years, matching Greece, ranked 36/224 countriesLowest StatesMississippi comes in at 74.6 years, matching Montserrat, ranked 122/224 countriesWest Virginia comes in at 74.9 years, matching Thailand, ranked 116/224 countriesAlabama comes in at 74.9 years, matching Iraq, ranked 117/224 countriesKentucky comes in at 75.1 years, matching Syria, ranked 111/224 countriesOther exciting pairings are where the state life expectancy matches countries that have been through a conflict of late. Countries like Iraq, Syria, Libya are all matching clustered southern states with low life expectancy such as South Carolina, Alabama, and Kentucky.SOURCE REFERENCESThese links will jump you to the bottom of the page with the references URL's.[3] CIA world book[13] IHME country profilesLife Expectancy: Income VS StateHow Much Longer Do The Rich Live In The Us?We used income data from a study by JAMA Network by Raj Chetty, his team, and Vox to populate this visualization showing the consistent lifespan disparity between the richest and poorest in every state.The Chetty study linked 1.4 billion tax returns to the Social Security Administration from all over the US, measuring mortality data. This data shows that, even now, each step you climb on the income ladder will consistently have a significant impact on your overall health and lifespan.Every step of the income ladder consistently adds years to your life in every state.With a 10-year life expectancy gap between rich and poor residents, the nation’s capital, D.C. has the biggest disparity.Kansas. Michigan, Delaware, South Carolina, Georgia, and Indiana have the next largest joint gap of 9 yearsCalifornia, Hawaii, Arizona, Alaska, Nevada, New York, New Jersey are the states with the joint lowest gap of 6 years1850 to 1874, there was a 20-year gap between the rich and general population’s expectancy of life.This gives a unique view of geographic variability in terms of the relationship between life expectancy and income. There was not one single state where income increases negatively impacted lifespan expectancy, and the gap in individual states was alarming.The poorest residents in D.C. could expect to live almost 10 years less than the richest. Even at the other end of the gradient, the data shows us there was still a 6 year gap between each end of the income scale. Looking back it the 1800’s, there was an upsurge in the availability of medical innovations in which only the very rich could afford. During 1850-1874, there was a 20-year gap between the rich and general population’s average lifespan; the irony is that this gap isn’t too different from the one present in D.C. today.A strong reason for the income gap could be related to the fact that the average age of a small business owner is 50.3 years old. This means a small business owner in D.C. is going to live longer and probably build more wealth over time.This data can also be used by companies that offer no medical exam life insurance to help them determine their rates based on overall life expectancy. If you haven't looked into getting covered, don't waste any time because we aren't living longer now days.SOURCE REFERENCESThese links will jump you to the bottom of the page with the references URL's.[3] CIA world book[13] IHME country profiles[14] JAMA Network income vs LE[15] VOX income vs LESTUDY RESOURCESREFERENCES, DATA SOURCES & DOWNLOADSDATA SOURCE AND METHODSAll the data in this study was collected from the medical institutions, and the government body’s references included below. The raw data from the charts and figures are available to download and includes the custom data used to create our own resources and unique views. At the time of this study in June 2019, the majority of life expectancy data is only available up until 2017, when 2018 data is released we will endeavor to update this resource to continue to provide an evergreen location for information.COPYRIGHT INFORMATIONAll data within this study is available via the public domain; therefore, may be copied without permission. We do, however, appreciate linking the citation as the source.SOURCE REFERENCES[1] 2] 3] 4] 18)31694-5/fulltext#seccestitle230[5] 6] 7] 8] 9] 10] 11] 13] 14] 15] As fictional optimist Chris Traeger once declared, “Scientists believe that the first human being who will live 150 years has already been born. I believe I am that human being.” While we literally can't know if Chris's prediction came true since he's a character from “Parks and Recreation” and not a real person, the past few years of trends may throw cold water on that view. Average American life expectancy, which had seen decades of improvement, has fallen for the past three consecutive years, according to a recent report by the federal Centers for Disease Control and Prevention. Though the decline is modest (78.8 years to 78.6 years), the fact that U.S. life expectancy is falling at all is cause for concern, and the consistent decline over the past few years is the worst life expectancy showing our country has had since a period between 1915 and 1918. There's no doubt the average American life is healthier and longer than it was over 100 years ago, but our modern lives are beginning to see a shift not just in how long we live but in what issues are most likely to contribute to our deaths. Heart disease and cancer remain the two leading causes of death, but recent years have seen huge increases in death rates from suicide, drug addiction and alcoholism. But the United States is a geographically vast and demographically diverse nation, and what's true on a national level may not play out in the same way on a state level. So we wanted to take a microscope to life expectancy and the changes observed in several causes of death to see which states have made the most progress in certain areas and which states are the epicenters of the tragic changes we've seen over the past decade. >>Read More: Life Expectancy Calculator Which States Have the Longest Lifespans? While the recent CDC report, which was released late in 2018, does not provide a breakdown of life expectancy by state, the Journal of the American Medical Association published a study in 2018 that examined life expectancy between 1990 and 2016. While those figures are now a few years old, they still provide a helpful baseline to understand where in the nation people live the longest (or shortest). People in Hawaii have the longest life expectancy at birth at 81.3 years, while Mississippi's 74.7-year life expectancy is the nation's lowest. The nine lowest life expectancy states are all in the South. While the JAMA study shows increases in life expectancy for each state over the study period, that's to be expected given that the analysis looked at a 26-year period before the U.S. began to see an overall trend downward in life expectancy. No states showed a decrease between 1990 and 2016, but several had modest gains, including Oklahoma's 0.9% increase, which was the smallest gain. New York showed by far the highest increase in life expectancy with a 7.8% increase. What’s Killing Us The Most? Heart disease and cancer remain the biggest killers of Americans, combining to cause more than 40% of all deaths. Heart disease and cancer kill more Americans than the next six top causes of death combined. In every state, heart disease and cancer rank as the No. 1 and No. 2 killers, though not always in that order. These two issues combine to cause about 1.2 million deaths in the U.S. each year; still, a great deal of progress has been made over the past decade in curbing death rates for both heart disease and cancer. So much so that when looking on a state-by-state level, we can see that every single state has lowered its rate of citizens dying from those conditions and that, with the exception of one state, all the decreases have been in the double digits. Heart Disease Heart disease death rates are highest in the South, where eight of the 10 states with the highest rates are located. Three states managed to produce 30%+ drops in their heart disease death rates between 2005 and 2017, according to CDC data — Delaware (-31.8%), Rhode Island (-31.3%) and New York (-31.1%). While no state recorded an increase in its heart disease death rate, three states had drops of around 10% — Arkansas (-10.6%), Utah (-10.5%) and Montana. Cancer As the second-leading cause of death nationally, cancer is responsible for over 1 in 5 deaths in the U.S. every year. Cancer death rates are highest in Kentucky (185.7 per 100,000) and lowest in Utah (120.3 per 100,000). All states have seen their cancer death rates decline over the past decade, though some states have made more progress than others. Seven of the 10 states with the biggest drops in the rate of cancer deaths are on the East Coast, while another eastern state, Vermont, posted the most modest decline, just 6%, the only single-digit decline recorded in either cancer or heart disease death rates. What’s Gaining Ground on Us? While suicide has been one of the 10 leading causes of death in the United States since 2008, death rates from intentional self-harm are skyrocketing, along with deaths from drug overdose and liver disease, which is most frequently connected with alcoholism and habitual binge drinking. Suicide More than 47,000 people took their own lives in 2017, according to CDC data, putting suicide at the No. 10 position in the top causes of death. No state has observed a drop in the rate of deaths from suicide since 2005, and a couple of states have seen their rates nearly double. Nevada saw the smallest change, but the state's suicide death rate still ranks in the top 10. Chronic Liver Disease Most frequently caused by alcohol abuse, chronic liver disease once was among the top 10 causes of death overall in the United States, and it remains a top cause for men, though it's no longer a top 10 cause for women. New Mexico has by far the highest rate of deaths from chronic liver disease and cirrhosis (26.8 per 100,000), while Maryland's rate of 6.6 per 100,000 is the lowest. It's likely Maryland's placement as the state with the lowest rate of chronic liver disease deaths is owing in part to the double-digit drop recorded in the state's death rate. Maryland was just one of two states to see their chronic liver disease death rate fall. Conversely, New Mexico saw the nation's largest increase in liver disease deaths and ranks at the very top of the overall death rate list. Drug Overdose Nearly 130 Americans die every day from opioid overdose, and more than 70,000 drug overdose deaths occurred in the United States in 2017. Drug overdose deaths are most common West Virginia (57.8 per 100,000) and least common in Nebraska (8.1 per 100,000). While some states are more fortunate in that their rates of drug deaths are much lower than the states with the highest rates on this list, the truth is that nowhere in the United States is immune from this crisis. Even just over the course of one year, 2016 to 2017, the CDC reported a nearly 10% increase in the rate of drug OD deaths in the U.S. This crisis is at epidemic levels, and it's not hard to see why. All 50 states saw at least double-digit increases in the rate of drug overdose deaths between 2005 and 2017, and tragically, more than half the states recorded increases in the triple digits. Conclusion We've made enormous strides over the years in raising awareness of and combatting what were previously considered the biggest medical threats we faced, from heart disease to cancer. But now pernicious new crop of conditions threaten to undo the years of medical and healthcare gains that have been made in the United States. It's true that the average American still is more likely to die from heart disease than from drug overdose, the huge jumps in these mental health-related causes of death are incredibly disturbing. We can't expect to solve substance abuse or depression tomorrow, but a crucial first step is simply getting our arms around the scope of this problem. If not, the increases in deaths from suicide, alcoholism and drug abuse that we've seen over the past decade could pale in comparison to the problems we'll face if these issues go unchecked. About This Report Death rates and change over time: Most of the information on this page came from the federal Centers for Disease Control and Prevention. We've included direct links to some of the data, but most of it, including the percentage increases and decreases in rates of deaths, were calculated by accessing the CDC's Stats of the States tool. That page's Causes of Death tab includes years of reports on nearly 20 major causes of death. We used the data from 2017 and from 2005 to calculate the change. In some cases, the CDC does not list a per 100,000 death rate for particular states because so few deaths were recorded. In those cases, we calculated the death rate manually using each state's population at the time. Other information: We've included direct links to all other information used on this page throughout the text. Fair Use Statement Feel free to share the material on this page for noncommercial purposes. When using any text or images from this page, please properly attribute the material and include a link back to the URL of this page. Looking for data or expertise to support your work? Measure of average lifespan in a given population This article is about normal lifespan. For the novel, see Life Expectancy (novel). "Human lifespan" redirects here. For the lifespan of a person in stages, see Maturation. This article may require cleanup to meet Wikipedia's quality standards. The specific problem is: Clarification needed at times. Please help improve this article if you can. (November 2022) (Learn how and when to remove this message) Life expectancy and healthy life expectancy in various countries of the world in 2019, according to WHO[1] Map of the life expectancy at birth in the world in 2023 (UN estimate, smooth palette)[2] Life expectancy at age 15 years[2] Life expectancy at age 65 years[2] Life expectancy at age 80 years[2] Life expectancy development in some big countries of the world since 1960 Life expectancy at birth, measured by region, between 1950 and 2050 Life expectancy by world region, from 1770 to 2018 Human life expectancy is a statistical measure of the estimate of the average remaining years of life at a given age. The most commonly used measure is life expectancy at birth (LEB, or in demographic notation e0, where ex denotes the average life remaining at age x). This can be defined in two ways. Cohort LEB is the mean length of life of a birth cohort (in this case, all individuals born in a given year) and can be computed only for cohorts born so long ago that all their members have died. Period LEB is the mean length of life of a hypothetical cohort[3][4] assumed to be exposed, from birth through death, to the mortality rates observed at a given year.[5] National LEB figures reported by national agencies and international organizations for human populations are estimates of period LEB. Human remains from the early Bronze Age indicate an LEB of 24.[6] In 2019, world LEB was 73.3.[7] A combination of high infant mortality and deaths in young adulthood from accidents, epidemics, plagues, wars, and childbirth, before modern medicine was widely available, significantly lowers LEB. For example, a society with a LEB of 40 would have relatively few people dying at exactly 40: most will die before 30 or after 55. In populations with high infant mortality rates, LEB is highly sensitive to the rate of death in the first few years of life. Because of this sensitivity, LEB can be grossly misinterpreted, leading to the belief that a population with a low LEB would have a small proportion of older people.[8] A different measure, such as life expectancy at age 5 (e5), can be used to exclude the effect of infant mortality to provide a simple measure of overall mortality rates other than in early childhood. For instance, in a society with a life expectancy of 30, it may nevertheless be common to have a 40-year remaining timespan at age 5 (but not a 60-year one[dubious – discuss]). Aggregate population measures—such as the proportion of the population in various age groups—are also used alongside individual-based measures—such as formal life expectancy—when analyzing population structure and dynamics. Pre-modern societies had universally higher mortality rates and lower life expectancies at every age for both males and females. Life expectancy, longevity, and maximum lifespan are not synonymous. Longevity refers to the relatively long lifespan of some members of a population. Maximum lifespan is the age at death for the longest-lived individual of a species. Mathematically, life expectancy is denoted e x {\displaystyle e_{x}} [a] and is the mean number of years of life remaining at a given age x {\displaystyle x} , with a particular mortality.[9] Because life expectancy is an average, a particular person may die many years before or after the expected survival. Life expectancy is also used in plant or animal ecology,[10] and in life tables (also known as actuarial tables). The concept of life expectancy may also be used in the context of manufactured objects,[11] though the related term[dubious – discuss] shelf life is commonly used for consumer products, and the terms "mean time to breakdown" and "mean time between failures" are used in engineering. The earliest documented work on life expectancy was done in the 1660s by John Graunt,[12] Christiaan Huygens, and Lodewijck Huygens.[13] The longest verified lifespan for any human is that of French woman Jeanne Calment, who is verified as having lived to age 122 years, 164 days, between 21 February 1875 and 4 August 1997. This is referred to as the "maximum life span", which is the upper boundary of life, the maximum number of years any human is known to have lived. Although maximum life expectancy is around 125 years, genetic enhancements could allow humans to live for a maximum of 245 years, according to InsideTracker.[14] According to a study by biologists Bryan G. Hughes and Siegfried Hekimi, there is no evidence for a limit on human lifespan.[15][16] However, this view has been questioned on the basis of error patterns.[17] A theoretical study shows that the maximum life expectancy at birth is limited by the human life characteristic value δ, which is around 104 years.[18] Further information: Longevity and List of countries by past life expectancy The following information is derived from the 1961 Encyclopædia Britannica and other sources, some with questionable accuracy. Unless otherwise stated, it represents estimates of the life expectancies of the world population as a whole. In many instances, life expectancy varied considerably according to class and gender. Life expectancy at birth takes account of infant mortality and child mortality but not prenatal mortality. Era Life expectancy at birth in years Notes Paleolithic 22–33[19] With modern hunter-gatherer populations' estimated average life expectancy at birth of 33 years, life expectancy for the 60% reaching age 15 averages 39 remaining years.[20] Neolithic 20[21]–33[22] Based on Early Neolithic data, life expectancy at age 15 would be 28–33 years.[23] Bronze Age and Iron Age[24] 26 Based on Early and Middle Bronze Age data, life expectancy at age 15 would be 28–36 years.[23] Classical Greece[25] 25[26]–28[27] Based on Athens Agora and Corinth data, life expectancy at age 15 would be 37–41 years.[23] Most Greeks and Romans died young. About half of all children died before adolescence. Those who survived to the age of 30 had a reasonable chance of reaching 50 or 60. The truly elderly, however, were rare. Because so many died in childhood, life expectancy at birth was probably between 20 and 30 years.[28] Ancient Rome 20–33 [29][30][31][28][19][32] Data is lacking, but computer models provide the estimate. If a person survived to age 20, they could expect to live around 30 years more. Life expectancy was probably slightly longer for women than men.[33] Life expectancy at age 1 reached 34–41 remaining years for the 67[29]–75% surviving the first year. For the 55-65% surviving to age 5, remaining life expectancy reached around 40–45,[31] while the ~50% reaching age 10 could expect another 40 years of life.[29] Average remaining years fell to 33–39 at age 15; ~20 at age 40;[29] 14–18 at age 50; ~10–12 at age 60; and ~6–7 at age 70.[31][33] Wang clan of China, 1st century AD – 1749 35 Life expectancy at age 1 reached 47 years for the 72% surviving the first year.[34][35] Early Middle Ages (Europe, from the late 5th or early 6th century to the 10th century) 30–35 A Gaulish boy surviving to age 20 might expect to live 25 more years, while a woman at age 20 could normally expect about 17 more years. Anyone who survived until 40 had a good chance of another 15 to 20 years.[36] Pre-Columbian Mesoamerica 20–40 Expectation of life at birth 13–36 years for various Pre-Columbian Mesoamerican cultures, most of the results lying in the range 24–32 years.[37] Aztec life expectancy 41.2 years for men and 42.1 for women.[38] Late medieval English peerage[39][40] 30–33[32] Around a third of infants died in their first year.[19] Life expectancy at age 10 reached 32.2 remaining years, and for those who survived to 25, the remaining life expectancy was 23.3 years. Such estimates reflected the life expectancy of adult males from the higher ranks of English society in the Middle Ages, and were similar to that computed for monks of the Christ Church in Canterbury during the 15th century.[32] At age 21, life expectancy of an aristocrat was an additional 43 years.[41] Early modern Britain (16th – 18th century)[24] 33–40 18th-century male life expectancy at birth was 34 years.[42] Female expectation of remaining years at age 15 rose from ~33 years around the 15th-16th centuries to ~42 in the 18th century.[43] 18th-century England[44][19] 25–40 For most of the century it ranged from 35 to 40; but in the 1720s it dipped as low as 25.[44] During the second half of the century it averaged 37,[45] while for the elite it passed 40 and approached 50.[34] Pre-Champlain Canadian Maritimes[46] 60 Samuel de Champlain wrote that in his visits to Mi'kmaq and Huron communities, he met people over 100 years old. Daniel Paul attributes the incredible lifespan in the region to low stress and a healthy diet of lean meats, diverse vegetables, and legumes.[47] 18th-century Prussia[42] 24.7 For males.[42] 18th-century France[42] 27.5–30 For males:[42] 24.8 years in 1740–1749, 27.9 years in 1750–1759, 33.9 years in 1800–1809.[35] 18th-century American colonies[19] 28 Massachusetts colonists who reached the age of 50 could expect to live until 71, and those who were still alive at 60 could expect to reach 75. Beginning of the 19th century[44] ~29 At the beginning of the 19th century, no country in the world had a life expectancy at birth longer than 40 years, England, Belgium and the Netherlands came closest, each reaching 40 years by the 1840s (by which time they had been surpassed by Norway, Sweden and Denmark). India's life expectancy is estimated at ~25 years,[44] while Europe averaged ~33 years.[45] Early 19th-century England[24][44][34] 40 Remaining years of life averaged ~45[34]–47 for the 84% who survived the first year. Life expectancy fell to ~40 years at age 20, then ~20 years at age 50 and ~10 years at age 70.[44] For a 15-year-old girl it was ~40–45.[43] For the upper-class, LEB rose from ~45 to 50.[34] Only half of the people born in the early 19th century made it past their 50th birthday. In contrast, 97% of the people born in 21st century England and Wales can expect to live longer than 50 years.[44] 19th-century British India[48] 25.4 19th-century world average[44] 28.5–32 Over the course of the century: Europe rose from ~33 to 43, the Americas from ~35 to 41, Oceania ~35 to 48, Asia ~28, Africa 26.[44] In 1820s France, LEB was ~38, and for the 80% that survived, it rose to ~47. For Moscow serfs, LEB was ~34, and for the 66% that survived, it rose to ~36.[34] Western Europe in 1830 was ~33 years, while for the people of Hau-Lou in China, it was ~40.[45] The LEB for a 10-year-old in Sweden rose from ~44 to ~54.[44] 1900 world average[49] 31–32[44] Around 48 years in Oceania, 43 in Europe, and 41 in the Americas.[44] Around 47 in the U.S.[19] and around 48 for 15-year-old girls in England.[43] 1950 world average[49] 45.7–48[44] Around 60 years in Europe, North America, Oceania, Japan, and parts of South America; but only 41 in Asia and 36 in Africa. Norway led with 72, while in Mali it was merely 26.[44] 2019–2020 world average 72.6–73.2 [44][50][51] Females: 75.6 years Males: 70.8 years Range: ~54 (Central African Republic) – 85.3 (Hong Kong)[51] English life expectancy at birth averaged about 36 years in the 17th and 18th centuries, one of the highest levels in the world although infant and child mortality remained higher than in later periods. Life expectancy was under 25 years in the early Colony of Virginia,[52] and in seventeenth-century New England, about 40% died before reaching adulthood.[53] During the Industrial Revolution, the life expectancy of children increased dramatically.[54] Recorded deaths among children under the age of 5 years fell in London from 74.5% of the recorded births in 1730–49 to 31.8% in 1810–29,[55][56] though this overstates mortality and its fall because of net immigration (hence more dying in the metropolis than were born there) and incomplete registration (particularly of births, and especially in the earlier period). English life expectancy at birth reached 41 years in the 1840s, 43 in the 1870s and 46 in the 1890s, though infant mortality remained at around 150 per thousand throughout this period. Life expectancy in 1800, 1950, and 2015 – visualization by Our World in Data Public health measures are credited with much of the recent increase in life expectancy. During the 20th century, despite a brief drop due to the 1918 flu pandemic,[57] the average lifespan in the United States increased by more than 30 years, of which 25 years can be attributed to advances in public health.[58] Further information: List of countries by life expectancyThere are great variations in life expectancy between different parts of the world, mostly caused by differences in public health, medical care, and diet.[59] Human beings are expected to live on average 60 years in Eswatini[60] and 82.6 years in Japan.[b] An analysis published in 2011 in The Lancet attributes Japanese life expectancy to equal opportunities, excellent public health, and a healthy diet.[62][63] The World Health Organization announced that the COVID-19 pandemic reversed the trend of steady gain in life expectancy at birth. The pandemic wiped out nearly a decade of progress in improving life expectancy.[64] Graphs of life expectancy at birth for some sub-Saharan countries showing the fall in the 1990s primarily due to the HIV pandemic[65] During the last 200 years, African countries have generally

not had the same improvements in mortality rates that have been enjoyed by countries in Asia, Latin America, and Europe.[66][67] This is most apparent by the impact of AIDS on many African countries. According to projections made by the United Nations in 2002, the life expectancy at birth for 2010–2015 (if HIV/AIDS did not exist) would have been:[68] 70.7 years instead of 31.6 years, Botswana 69.9 years instead of 41.5 years, South Africa 70.5 years instead of 31.8 years, Zimbabwe On average, eastern Europeans tend to live shorter lives than their western counterparts. For example, Spaniards from Madrid can expect to live to 85, but Bulgarians from the region of Severozapaden are predicted to live just past their 73rd birthday. This is in large part due to poor health habits, such as heavy smoking and high alcoholism in the region, and environmental factors, such as high air pollution.[69] Life expectancy from 1990 to 2021 in the US, UK, Netherlands, and AustriaIn 2022, the life expectancy was 77.5 in the United States, a decline from 2014, but an increase from 2021. In what has been described as a "life expectancy crisis", there were a total of 13 million "missing Americans" from 1980 to 2021, deaths that would have been averted if it had the standard mortality rate of "wealthy nations".[citation needed] The annual number of "missing Americans" has been increasing, with 622,534 in 2019 alone.[70] Most excess deaths in the United States can largely be attributed to increasing obesity, alcoholism, drug overdoses, car accidents, suicides, and murders, with poor sleep, unhealthy diets, and loneliness being linked to most of them.[71] Black Americans have generally shorter life expectancies than their White American counterparts. For example, white Americans in 2010 are expected to live until age 78.9, but black Americans only until age 75.1. This 3.8-year gap, however, is the lowest it has been since 1975 at the latest, the greatest difference being 7.1 years in 1993.[72] In contrast, Asian American women live the longest of all ethnic and gender groups in the United States, with a life expectancy of 85.8 years.[73] The life expectancy of Hispanic Americans is 81.2 years.[72] In 2023, the life expectancy was 84.5 in Japan, 4.2 years above the OECD average, and one of the highest in the world. Japan's high life expectancy can largely be explained by their healthy diets, which are low on salt, fat, and red meat. For these reasons, Japan has a low obesity rate, and ultimately low mortality from heart disease and cancers.[74] Cities also experience a wide range of life expectancy based on neighborhood breakdowns. This is largely due to economic clustering and poverty conditions that tend to associate based on geographic location. Multi-generational poverty found in struggling neighborhoods also contributes. In American cities such as Cincinnati, the life expectancy gap between low income and high-income neighborhoods touches 20 years.[75] See also: Preston curve Life expectancy vs healthcare spending of rich OECD countries. US average of $10,447 in 2018.[76] Economic circumstances also affect life expectancy. For example, in the United Kingdom, life expectancy in the wealthiest and richest areas is several years higher than in the poorest areas. This may reflect factors such as diet and lifestyle, as well as access to medical care. It may also reflect a selective effect: people with chronic life-threatening illnesses are less likely to become wealthy or to reside in affluent areas.[77] In Glasgow, the disparity is amongst the highest in the world: life expectancy for males in the heavily deprived Calton area stands at 54, which is 28 years less than in the affluent area of Lenzie, which is only 8 km (5.0 mi) away.[78][79] A study published in the American Geriatrics Society found that the average life expectancy of the Chinese emperors (which have much wealth) from the first Qin Dynasty (221–207 BC) to the last Qing Dynasty, was 41.3 years. This is much lower than that of the Buddhist monks (66.9 years) traditional Chinese doctors (75.1 years) and the emperors' servant, who survived to 71.3 years (range 55–94), during the same time.[80] A 2013 study found a pronounced relationship between economic inequality and life expectancy.[81] However, in contrast, a study by José A. Tapia Granados and Ana Diez Roux at the University of Michigan found that life expectancy actually increased during the Great Depression, and during recessions and depressions in general.[82] The authors suggest that when people are working at a more extreme degree during prosperous economic times, they undergo more stress, exposure to pollution, and the likelihood of injury among other longevity-limiting factors. Life expectancy is also likely to be affected by exposure to high levels of highway air pollution or industrial air pollution. This is one way that occupation can have a major effect on life expectancy. Coal miners (and in prior generations, asbestos cutters) often have lower life expectancies than average. Other factors affecting an individual's life expectancy are genetic disorders, drug use, tobacco smoking, excessive alcohol consumption, obesity, access to health care, diet, and exercise. Life expectancy and healthy life expectancy by sex in 2019[1] Pink: Countries where female life expectancy at birth is higher than males. Blue: A few countries in southern Africa where females have shorter lives due to AIDS. (2015)[83] "Gender Die Gap": global female life expectancy gap at birth for countries and territories as defined by WHO for 2019. Open the original svg-file and hover over a bubble to show its data. The square of the bubbles is proportional to country population based on estimation of the UN. In the present, female human life expectancy is greater than that of males, despite females having higher morbidity rates (see health survival paradox). There are many potential reasons for this. Traditional arguments tend to favor sociology-environmental factors: historically, men have generally consumed more tobacco, alcohol, and drugs than women in most societies, and are more likely to die from many associated diseases such as lung cancer, tuberculosis, and cirrhosis of the liver.[84] Men are also more likely to die from injuries, whether unintentional (such as occupational, war, or car wrecks) or intentional (suicide).[84] Men are also more likely to die from most of the leading causes of death (some already stated above) than women. Some of these in the United States include cancer of the respiratory system, motor vehicle accidents, suicide, cirrhosis of the liver, emphysema, prostate cancer, and coronary heart disease.[14] These far outweigh the female mortality rate from breast cancer and cervical cancer. In the past, mortality rates for females in child-bearing age groups were higher than for males at the same age. A paper from 2015 found that female foetuses have a higher mortality rate than male foetuses.[85] This finding contradicts papers dating from 2002 and earlier that attribute the male sex to higher in-utero mortality rates.[86][87][88] Among the smallest premature babies (those under 2 pounds (910 grams)), females have a higher survival rate. At the other extreme, about 90% of individuals aged 110 are female. The difference in life expectancy between men and women in the United States dropped from 7.8 years in 1979 to 5.3 years in 2005, with women expected to live to age 80.1 in 2005.[89] Data from the United Kingdom shows the gap in life expectancy between men and women decreasing in later life. This may be attributable to the effects of infant mortality and young adult death rates.[90] Some argue that shorter male life expectancy is merely another manifestation of the general rule, seen in all mammal species, that larger-sized individuals within a species tend, on average, to have shorter lives.[91][92] This biological difference[clarification needed] occurs because women have more resistance to infections and degenerative diseases.[14] In her extensive review of the existing literature, Kalben concluded that the fact that women live longer than men was observed at least as far back as 1750 and that, with relatively equal treatment, today males in all parts of the world experience greater mortality than females. However, Kalben's study was restricted to data in Western Europe alone, where the demographic transition occurred relatively early. United Nations statistics from mid-twentieth century onward, show that in all parts of the world, females have a higher life expectancy at age 60 than males.[93] Of 72 selected causes of death, only 6 yielded greater female than male age-adjusted death rates in 1998 in the United States. Except for birds, for almost all of the animal species studied, males have higher mortality than females. Evidence suggests that the sex mortality differential in people is due to both biological/genetic and environmental/behavioral risk and protective factors.[86] One recent suggestion is that mitochondrial mutations which shorten lifespan continue to be expressed in males (but less so in females) because mitochondria are inherited only through the mother. By contrast, natural selection weeds out mitochondria that reduce female survival; therefore, such mitochondria are less likely to be passed on to the next generation. This thus suggests that females tend to live longer than males. The authors claim that this is a partial explanation.[94][95] Another explanation is the unguarded X hypothesis. According to this hypothesis, one reason for why the average lifespan of males is not as long as that of females––by 18% on average, according to the study––is that they have a Y chromosome which cannot protect an individual from harmful genes expressed on the X chromosome, while a duplicate X chromosome, as present in female organisms, can ensure harmful genes are not expressed.[96][97] In developed countries, starting around 1880, death rates decreased faster among women, leading to differences in mortality rates between males and females. Before 1880, death rates were the same. In people born after 1900, the death rate of 50- to 70-year-old men was double that of women of the same age. Men may be more vulnerable to cardiovascular disease than women, but this susceptibility was evident only after deaths from other causes, such as infections, started to decline.[98] Most of the difference in life expectancy between the sexes is accounted for by differences in the rate of death by cardiovascular diseases among persons aged 50–70.[99] Further information: Genetics of aging The heritability of lifespan is estimated to be less than 10%, meaning the majority of variation in lifespan is attributable due to differences in environment rather than genetic variation.[100] However, researchers have identified regions of the genome which can influence the length of life and the number of years lived in good health. For example, a genome-wide association study of 1 million lifespans found 12 genetic loci which influenced lifespan by modifying susceptibility to cardiovascular and smoking-related disease.[101] The locus with the largest effect is APOE. Carriers of the APOE ε4 allele live approximately one year less than average (per copy of the ε4 allele), mainly due to increased risk of Alzheimer's disease.[101] "Healthspan, parental lifespan, and longevity are highly genetically correlated."[102] In July 2020, scientists identified 10 genomic loci with consistent effects across multiple lifespan-related traits, including healthspan, lifespan, and longevity.[102] The genes affected by variation in these loci highlighted haem metabolism as a promising candidate for further research within the field. This study suggests that high levels of iron in the blood likely reduce, and genes involved in metabolising iron likely increase healthy years of life in humans.[103] A follow-up study which investigated the genetics of frailty and self-rated health in addition to healthspan, lifespan, and longevity also highlighted haem metabolism as an important pathway, and found genetic variants which lower blood protein levels of LPA and VCAM1 were associated with increased healthy lifespan.[104] Main article: Centenarian In developed countries, the number of centenarians is increasing at approximately 5.5% per year, which means doubling the centenarian population every 13 years, pushing it from some 455,000 in 2009 to 4.1 million in 2050.[105] Japan is the country with the highest ratio of centenarians (347 for every 1 million inhabitants in September 2010). Shimane Prefecture had an estimated 743 centenarians per million inhabitants.[106] In the United States, the number of centenarians grew from 32,194 in 1980 to 71,944 in November 2010 (232 centenarians per million inhabitants).[107] Mental illness is reported to occur in approximately 18% of the average American population.[108][109] Life expectancy in the seriously mentally ill is much shorter than the general population.[110] The mentally ill have been shown to have a 10- to 25-year reduction in life expectancy.[111] Generally, the reduction of lifespan in the mentally ill population compared to the mentally stable population has been studied and documented.[112][113][114][115][116] The greater mortality of people with mental disorders may be due to death from injury, from co-morbid conditions, or medication side effects.[117] For instance, psychiatric medications can increase the risk of developing diabetes.[118][119][120][121] It has been shown that the psychiatric medication olanzapine can increase risk of developing agranulocytosis, among other comorbidities.[122][123] Psychiatric medicines also affect the gastrointestinal tract; the mentally ill have a four times risk of gastrointestinal disease.[124][125][126] As of 2020 and the COVID-19 pandemic, researchers have found an increased risk of death in the mentally ill.[127][128][129] The life expectancy of people with diabetes, which is 9.3% of the U.S. population, is reduced by roughly 10–20 years.[130][131] People over 60 years old with Alzheimer's disease have about a 50% life expectancy of 3–10 years.[132] Other demographics that tend to have a lower life expectancy than average include transplant recipients[133] and the obese.[134] Education on all levels has been shown to be strongly associated with increased life expectancy.[135] This association may be due partly to higher income,[136] which can lead to increased life expectancy. Despite the association, among identical twin pairs with different education levels, there is only weak evidence of a relationship between educational attainment and adult mortality.[135] According to a paper from 2015, the mortality rate for the Caucasian population in the United States from 1993 to 2001 is four times higher[dubious – discuss] for those who did not complete high school compared to those who have at least 16 years of education.[135] In fact, within the U.S. adult population, people with less than a high school education have the shortest life expectancies. Preschool education also plays a large role in life expectancy. It was found that high-quality early-stage childhood education had positive effects on health. Researchers discovered this by analyzing the results of the Carolina Abecedarian Project, finding that the disadvantaged children who were randomly assigned to treatment had lower instances of risk factors for cardiovascular and metabolic diseases in their mid-30s.[137] In June 2024, Italian researchers showed that the Covid-19 mRNA vaccination raised all-cause mortality risks and caused a statistically significant loss of life expectancy. The retrospective cohort study found that the adjusted hazard ratio (HR) in terms of all-cause deaths between those who got two doses of the mRNA vaccine and the unvaccinated group was 1.98, and the restricted mean survival time (RMST) difference was -2.71. The study showed that the restricted mean time lost (RMTL) ratio between the two-dose group and the unvaccinated was 1.37, suggesting that those who received two doses of the shots could lose 37 percent of their life expectancy.[138] Main article: Life history theory Various species of plants and animals, including humans, have different lifespans. Evolutionary theory states that organisms which—by virtue of their defenses or lifestyle—live for long periods and avoid accidents, disease, predation, etc. are likely to have genes that code for slow aging, which often translates to good cellular repair. One theory is that if predation or accidental deaths prevent most individuals from living to an old age, there will be less natural selection to increase the intrinsic life span.[139] That finding was supported in a classic study of opossums by Austad;[140] however, the opposite relationship was found in an equally prominent study of guppies by Reznick.[141][142] One prominent and very popular theory states that lifespan can be lengthened by a tight budget for food energy called caloric restriction.[143] Caloric restriction observed in many animals (most notably mice and rats) shows a near doubling of life span from a very limited calorific intake. Support for the theory has been bolstered by several new studies linking lower basal metabolic rate to increased life expectancy.[144][145][146] That is the key to why animals like giant tortoises can live so long.[147] Studies of humans with life spans of at least 100 have shown a link to decreased thyroid activity, resulting in their lowered metabolic rate.[citation needed] The ability of skin fibroblasts to perform DNA repair after UV irradiation was measured in shrew, mouse, rat, hamster, cow, elephant and human.[148] It was found that DNA repair capability increased systematically with species life span. Since this original study in 1974, at least 14 additional studies were performed on mammals to test this correlation.[149] In all, but two of these studies, lifespan correlated with DNA repair levels, suggesting that DNA repair capability contributes to life expectancy.[149] See DNA damage theory of aging. In a broad survey of zoo animals, no relationship was found between investment of the animal in reproduction and its life span.[150] Further information: Life table § The mathematics A survival tree to explain the calculations of life-expectancy. Red numbers indicate a chance of survival at a specific age, and blue ones indicate age-specific death rates. In actuarial notation, the probability of surviving from age x {\displaystyle x} to age x + n {\displaystyle x+n} is denoted n p x {\displaystyle \,_{n}p_{x}\!} and the probability of dying during age x {\displaystyle x} (i.e. between ages x {\displaystyle x} and x + 1 {\displaystyle x+1}) is denoted q x {\displaystyle q_{x}\!} . For example, if 10% of a group of people alive at their 90th birthday die before their 91st birthday, the age-specific death probability at 90 would be 10%. This probability describes the likelihood of dying at that age, and is not the rate at which people of that age die.[c] It can be shown that k p x q x + k = k p x − k + 1 p x {\displaystyle {}_{k}p_{x}\,q_{x+k}={}_{k}p_{x}-{}_{k+1}p_{x}} 1 The curtate future lifetime, denoted K (x) {\displaystyle K(x)} , is a discrete random variable representing the remaining lifetime at age x {\displaystyle x} , rounded down to whole years. Life expectancy, more technically called the curtate expected lifetime and denoted e x {\displaystyle \,e_{x}\!} ,[a] is the mean of K (x) {\displaystyle K(x)} —that is to say, the expected number of whole years of life remaining, assuming survival to age x {\displaystyle x} .[151] So, e x = E ⁡ [K (x)] = ∑ k = 0 ∞ k ⋅ Pr (K (x) = k) = ∑ k = 0 ∞ k k p x q x + k {\displaystyle e_{x}=\operatorname {E} [K(x)]=\sum _{k=0}^{\infty }k\,\cdot \Pr(K(x)=k)=\sum _{k=0}^{\infty }k\,\,_{k}p_{x}\,\,q_{x+k}} 2 Substituting (1) into the sum and simplifying gives the final result[152] e x = ∑ k = 1 ∞ k p x {\displaystyle e_{x}=\sum _{k=1}^{\infty }{}\,\,\,_{k}p_{x}} 3 If the assumption is made that, on average, people live a half year on the year of their death, the complete life expectancy at age x {\displaystyle x} would be e x + 1 / 2 {\displaystyle e_{x}+1/2} , which is denoted by e̊x, and is the intuitive definition of life expectancy. By definition, life expectancy is an arithmetic mean. It can also be calculated by integrating the survival curve from 0 to positive infinity (or equivalently to the maximum lifespan, sometimes called 'omega'). For an extinct or completed cohort (all people born in the year 1850, for example), it can of course simply be calculated by averaging the ages at death. For cohorts with some survivors, it is estimated by using mortality experience in recent years. The estimates are called period cohort life expectancies. The starting point for calculating life expectancy is the age-specific death rates of the population members. If a large amount of data is available, a statistical population can be created that allow the age-specific death rates to be simply taken as the mortality rates actually experienced at each age (the number of deaths divided by the number of years "exposed to risk" in each data cell). However, it is customary to apply smoothing to remove (as much as possible) the random statistical fluctuations from one year of age to the next. In the past, a very simple model used for this purpose was the Gompertz function, but more sophisticated methods are now used.[153] The most common modern methods include: fitting a mathematical formula (such as the Gompertz function, or an extension of it) to the data. looking at an established mortality table derived from a larger population and making a simple adjustment to it (such as multiplying by a constant factor) to fit the data. (In cases of relatively small amounts of data.) looking at the mortality rates actually experienced at each age and applying a piecewise model (such as by cubic splines) to fit the data. (In cases of relatively large amounts of data.) A 2024 study estimated that each cigarette reduces life expectancy by 20 minutes.[154][155] The age-specific death rates are calculated separately for separate groups of data that are believed to have different mortality rates (such as males and females, or smokers and non-smokers) and are then used to calculate a life table from which one can calculate the probability of surviving to each age. While the data required are easily identified in the case of humans, the computation of life expectancy of industrial products and wild animals involves more indirect techniques. The life expectancy and demography of wild animals are often estimated by capturing, marking, and recapturing them.[156] The life of a product, more often termed shelf life, is also computed using similar methods. In the case of long-lived components, such as those used in critical applications (e.g. aircraft), methods like accelerated aging are used to model the life expectancy of a component.[11] The life expectancy statistic is usually based on past mortality experience and assumes that the same age-specific mortality rates will continue. Thus, such life expectancy figures need to be adjusted for temporal trends before calculating how long a currently living individual of a particular age is expected to live. Period life expectancy remains a commonly used statistic to summarize the current health status of a population. However, for some purposes, such as pensions calculations, it is usual to adjust the life table used by assuming that age-specific death rates will continue to decrease over the years, as they have usually done in the past. That is often done by simply extrapolating past trends, but some models exist to account for the evolution of mortality, like the Lee–Carter model.[157] As discussed above, on an individual basis, some factors correlate with longer life. Factors that are associated with variations in life expectancy include family history, marital status, economic status, physique, exercise, diet, drug use (including smoking and alcohol consumption), disposition, education, environment, sleep, climate, and health care.[14] To assess the quality of these additional years of life, 'healthy life expectancy' has been calculated for the last 30 years. Since 2001, the World Health Organization has published statistics called Healthy life expectancy (HALE), defined as the average number of years that a person can expect to live in "full health" excluding the years lived in less than full health due to disease and/or injury.[158][159] Since 2004, Eurostat publishes annual statistics called Healthy Life Years (HLY) based on reported activity limitations. The United States uses similar indicators in the framework of the national health promotion and disease prevention plan "Healthy People 2010". More and more countries are using health expectancy indicators to monitor the health of their population. Healthy Life Expectancy (HALE) vs GDP per Capita in different countries The long-standing quest for longer life led in the 2010s to a more promising focus on increasing HALE, also known as a person's "healthspan". Besides the benefits of keeping people healthier longer, a goal is to reduce health-care expenses on the many diseases associated with cellular senescence. Approaches being explored include fasting, exercise, and senolytic drugs.[160] Forecasting life expectancy and mortality form an important subdivision of demography. Future trends in life expectancy have huge implications for old-age support programs (like U.S. Social Security and pension) since the cash flow in these systems depends on the number of recipients who are still living (along with the rate of return on the investments or the tax rate in pay-as-you-go systems). With longer life expectancies, the systems see increased cash outflow; if the systems underestimate increases in life-expectancies, they will be unprepared for the large payments that will occur, as humans live longer and longer. Life expectancy forecasting is usually based on one of two different approaches: Forecasting the life expectancy directly, generally using ARIMA or other time-series extrapolation procedures. This has the advantage of simplicity, but it cannot account for changes in mortality at specific ages, and the forecast number cannot be used to derive other life table results. Analyses and forecasts using this approach can be done with any common statistical/mathematical software package, like EViews, R, SAS, Stata, Matlab, or SPSS. Forecasting age-specific death rates and computing the life expectancy from the results with life table methods. This is usually more complex than simply forecasting life expectancy because the analyst must deal with correlated age-specific mortality rates, but it seems to be more robust than simple one-dimensional time series approaches. It also yields a set of age-specific rates that may be used to derive other measures, such as survival curves or life expectancies at different ages. The most important approach in this group is the Lee-Carter model,[161] which uses the singular value decomposition on a set of transformed age-specific mortality rates to reduce their dimensionality to a single time series, forecasts that time series, and then recovers a full set of age-specific mortality rates from that forecasted value. The software includes Professor Rob J. Hyndman's R package called 'demography' and UC Berkeley's LCFIT system. Life expectancy is one of the factors in measuring the Human Development Index (HDI) of each nation along with adult literacy, education, and standard of living.[162] Life expectancy is used in describing the physical quality of life of an area. It is also used for an individual when the value of a life settlement is determined a life insurance policy is sold for a cash asset.[clarification needed] Disparities in life expectancy are often cited as demonstrating the need for better medical care or increased social support. A strongly associated indirect measure is income inequality. For the top 21 industrialized countries, if each person is counted equally, life expectancy is lower in more unequal countries (r = −0.907).[163] There is a similar relationship among states in the U.S. (r = −0.620).[164] "Remaining" life expectancy—expected number of remaining years of life as a function of current age—is used in retirement income planning.[165] Life expectancy may be confused with the average age an adult could expect to live, creating the misunderstanding that an adult's lifespan would be unlikely to exceed their life expectancy at birth. This is not the case, as life expectancy is an average of the lifespans of all individuals, including those who die before adulthood. One may compare the life expectancy of the period after childhood to estimate also the life expectancy of an adult.[166] As a measure of the years of life remaining, life expectancy decreases with age after initially rising in early childhood, but the average age to which a person is likely to live increases as they survive to successive higher ages.[167] In the table above, the estimated modern hunter-gatherer average expectation of life at birth of 33 years (often considered an upper-bound for Paleolithic populations) equates to a life expectancy at 15 of 39 years, so that those surviving to age 15 will on average die at 54. In England in the 13th–19th centuries with life expectancy at birth rising from perhaps 25 years to over 40, expectation of life at age 30 has been estimated at 20–30 years,[168] giving an average age at death of about 50–60 for those (a minority at the start of the period but two-thirds at its end) surviving beyond their twenties. Life expectancy[165] increases with age already achieved. The table above gives the life expectancy at birth among 13th-century English nobles as 30–33, but having surviving to the age of 21, a male member of the English aristocracy could expect to live: 1200–1300: to age 64 1300–1400: to age 45 (because of the bubonic plague) 1400–1500: to age 69 1500–1550: to age 71[41] A further concept is that of modal age at death, the single age when deaths among a population are more numerous than at any other age. In all pre-modern societies the most common age at death is the first year of life: it is only as infant mortality falls below around 33–34 per thousand (roughly a tenth of estimated ancient and medieval levels) that deaths in a later year of life (usually around age 80) become more numerous. While the most common age of death in adulthood among modern hunter-gatherers (often taken as a guide to the likely most favourable Paleolithic demographic experience) is estimated to average 72 years,[169] the number dying at that age is dwarfed by those (over a fifth of all infants) dying in the first year of life, and only around a quarter usually survive to the higher age. Maximum life span is an individual-specific concept, and therefore is an upper bound rather than an average.[166] Science author Christopher Wanjek writes, "[H]as the human race increased its life span? Not at all. This is one of the biggest misconceptions about old age: we are not living any longer." The maximum life span, or oldest age a human can live, may be constant.[166] Further, there are many examples of people living significantly longer than the average life expectancy of their time period, such as Socrates (71), Saint Anthony the Great (105), Michelangelo (88), and John Adams (90).[166] However, anthropologist John D. Hawks criticizes the popular conflation of life span (life expectancy) and maximum life span when popular science writers falsely imply that the average adult human does not live longer than their ancestors. He writes, "[a]ge-specific mortality rates have declined across the adult lifespan. A smaller fraction of adults die at 20, at 30, at 40, at 50, and so on across the lifespan. As a result, we live longer on average... In every way we can measure, human lifespans are longer today than in the immediate past, and longer today than they were 2000 years ago... age-specific mortality rates in adults really have reduced substantially."[170] Biodemography Calorie restriction Demography Depreciation DNA damage theory of aging Glasgow effect Health equity Life extension Life table Lindy effect List of countries by life expectancy List of countries by past life expectancy List of longest-living organisms LGBT life expectancy Maximum life span Medieval demography Mitohormesis Mortality rate Population pyramid Senescence Strategies for engineered negligible senescence (SENS) John Sperling Life extension Longevity Rejuvenation Public health Infant mortality ^ a b In standard actuarial notation, ex refers to the expected future lifetime of (x) in whole years, while e̊x (with a ring above the e) denotes the complete expected future lifetime of (x), including the fraction. ^ Japan's recorded life expectancy may have been very slightly increased by counting many infant deaths as stillborn.[61] ^ Note the different units: a probability is unit-less, whereas a mortality rate has units (such as deaths per population per year).

^ a b "Life expectancy and Healthy life expectancy, data by country". World Health Organization. 4 December 2020. ^ a b c d "World Population Prospects 2024" (XLSX). United Nations Department of Economic and Social Affairs. – see file "Compact (most used: estimates and medium projections)" ^ Ortiz-Ospina E (28 August 2017). ""Life Expectancy" – What does this actually mean?". Our World in Data. Retrieved 31 August 2020. ^ "Period and cohort life expectancy explained: December 2019". Office for National Statistics. UK Government. Retrieved 31 August 2020. ^ Shryock HS, Siegel JS (1973). The Methods and Materials of Demography (rev. ed.). Washington, DC: Bureau of the Census, Government Printing Office. ^ MacLennan WJ, Sellers WI (January 1999). "Ageing through the ages". Proceedings of the Royal College of Physicians of Edinburgh. 29 (1): 71–5. doi:10.1177/147827159902900114. PMID 11623672. ^ "Life expectancy at birth (years) [Indicator]". World Health Organization. 2023. 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