

CAUSE NO. 20-DCV-270138

RICKIE HERRING AND
DIANA HERRING
VS.

ENZO VALENZI AND LAURA VALENZI

§ IN THE DISTRICT COURT OF
§
§ FORT BEND COUNTY, TEXAS
§ Fort Bend County - 268th Judicial District Court
§ _____ JUDICIAL DISTRICT

PLAINTIFFS' ORIGINAL PETITION

TO THE HONORABLE JUDGE OF SAID COURT:

RICKIE HERRING AND DIANA HERRING ("Plaintiffs") file this Plaintiffs' Original Petition, and discovery attached hereto, complaining of **ENZO VALENZI AND LAURA VALENZI** ("Defendants") and show:

1. Pursuant to Texas Rule of Civil Procedure 1999, Rule 190, Discovery Limitations, this lawsuit is governed by Rule 190.3, Discovery Control Plan Level 2, as the amount in controversy is more than \$50,000.

REQUESTS FOR DISCLOSURE

2. Plaintiffs request that Defendants disclose the information or material described in Rule 194.2(a)-(l) and continue to supplement same.

JURISDICTION & VENUE

3. This court has jurisdiction because the damages sought are in excess of the minimum jurisdictional limits of the court. Defendants have availed themselves to the jurisdiction of this Court and no inconvenience to the parties would arise as result of adjudicating this matter in Fort Bend County, Texas.

4. Venue is proper in Fort Bend County, Texas, because all or a substantial part of the actual and/or anticipated events or omissions giving rise to Plaintiffs' claims occurred in Fort Bend County, Texas. Therefore, pursuant to TEX. CIV. PRAC. & REM. CODE §15.002(a)(1)(2) (West 2008), venue is proper, generally, in Fort Bend County, Texas.

THE PARTIES

5. Pursuant to §30.014 of the TEX. CIV. PRAC. & REM. CODE, Plaintiff **RICKIE HERRING** is an individual resident of Fort Bend County, Texas. The last three numbers of

Plaintiff's Social Security Number are [REDACTED] and the last three numbers of Plaintiff's driver's license are [REDACTED]

6. Pursuant to §30.014 of the TEX. CIV. PRAC. & REM. CODE, Plaintiff **DIANA HERRING** is an individual resident of Fort Bend County, Texas. The last three numbers of Plaintiff's Social Security Number are [REDACTED] and the last three numbers of Plaintiff's driver's license are [REDACTED]

7. Defendant **ENZO VALENZI** is an individual resident of Fort Bend County, Texas and may be served with Citation at his place of residence at [REDACTED]

8. Defendant **LAURA VALENZI** is an individual resident of Harris County, Texas and may be served with Citation at her place of residence at [REDACTED]

NATURE OF LAWSUIT

9. On or about April 7, 2018, Plaintiff, **RICKIE HERRING**, was attacked and bitten by an Akita named "Whiskey." Said dog was owned by Defendants and kept, maintained, and/or controlled by Defendants at the residence located at or near [REDACTED]. Defendants' dog attacked and killed Plaintiffs' dog. Plaintiff, **DIANA HERRING**, was injured while she tended to her dog following the attack. This is an action for damages arising out of Plaintiffs' personal injuries sustained in that incident. Unbeknownst to the Plaintiffs, the dog in question was known to Defendants as an aggressive dog. Although Defendants were fully aware of said dog's aggressive tendencies, Defendants failed to advise and/or warn Plaintiffs that the dog had aggressive tendencies unprovoked, nor that the dog was in fact a "dangerous dog."

NEGLIGENCE AND NEGLIGENCE PER SE CAUSES OF ACTION

10. Plaintiffs would show that Defendants were the "owners" and/or possessors of the dog in question.

11. Plaintiffs' resulting injuries were directly and proximately caused by one, more, or all of the following negligent acts and/or omissions of Defendants:

- a. Failing to exercise reasonable and proper care in restraining the dog;

- b. Failing to exercise reasonable and proper care in leashing the dog;
- c. Failing to exercise reasonable and proper care in monitoring the dog;
- d. Failing to exercise reasonable and proper care in warning Plaintiffs of the dog's vicious tendencies;
- e. Failing to require a known dangerous dog to wear an orange collar with black letters stating "Dangerous Dog;"
- f. Failing to maintain a known dangerous dog in a secure enclosure;
- g. Violating the following sections of Texas Health and Safety Code Title 10:

822.005, (a) A person commits an offense if the person is the owner of a dog and the person:

(2) knows the dog is dangerous by learning in a manner described by section 822.042(g) that the person is the owner of a dangerous dog, and the dangerous dog makes an unprovoked attack on another person that occurs at a location other than a secure enclosure in which the dog is restrained in accordance with Subchapter D and that causes serious bodily injury, as defined by section 822.001 or death to the other person. This constitutes negligence and negligence per se.

822.044 Attack by Dangerous Dog:

(a) A person commits an offense if the person is the owner of a dangerous dog and the dog makes an unprovoked attack on another person outside the dog's enclosure and causes bodily injury to the other person. This also constitutes negligence and negligence per se.

- h. Failing to muzzle a known dangerous dog while the dog was outside a secure enclosure which constitutes both negligence and negligence per se.

12. Each of the foregoing acts of negligence was a proximate cause of Plaintiffs' resulting injuries and damages.

13. Plaintiffs further plead that at all times material to the incident in question, Defendants were the owners of the dog that attacked Plaintiff **RICKIE HERRING** and Plaintiffs' dog. Pursuant to Texas Health & Safety Code §822.041(5) dog "owner" is defined as a person who owns or has custody of the dog. Texas Health & Safety Code §822.101(6) defines person as any "individual, partnership, corporation, trust, estate, company, foundation, or association."

14. At all times material to this case, the dog in question was a “dangerous dog” as defined by the Texas Health & Safety Code §822.041(2), which reads:

“(2) “Dangerous dog” means a dog that:

(A) makes an unprovoked attack on a person that causes bodily injury and occurs in a place other than an enclosure in which the dog was being kept and that was reasonably certain to prevent the dog from leaving the enclosure on its own; or

(B) commits unprovoked acts in a place other than an enclosure in which the dog was being kept and that was reasonably certain to prevent the dog from leaving the enclosure on its own and those acts cause a person to reasonably believe that the dog will attack and cause bodily injury to that person.”

15. Because the dog was known as a dangerous dog, Defendants had a duty to restrain the dog at all times on a leash in the immediate control of a person or in a secure enclosure. See Texas Health & Safety Code §822.042. “Secure enclosure” is defined as follows by the Texas Health & Safety Code §822.041(4):

(4) “Secure enclosure” means a fenced area or structure that is:

(A) locked;

(B) capable of preventing the entry of the general public, including children;

(C) capable of preventing the escape or release of a dog; and

(D) clearly marked as containing a dangerous dog.

16. Defendants wholly and utterly failed to comply with the requirements of owning dangerous dogs and said failure directly resulted in Plaintiffs’ injuries and damages. Said conduct constitutes gross negligence. Defendants further violated Texas Health & Safety Code §822.005(a) which reads:

“A person commits an offence if the person is the owner of a dog and the person...

(2) knows the dog is a dangerous dog by learning in a manner described by Section 822.042(g) that the person is the owner of a dangerous dog, and the dangerous dog makes an unprovoked attack on another person that occurs at a location other than a secure enclosure in which the dog is restrained in accordance with Subchapter D and that causes serious bodily injury, as defined by Section 822.01, or death to the other person.

(b) an offence under this section is a felony of the third degree unless the attack causes death, in which event the offense is a felony of the second degree.”

Said violation constitutes gross negligence.

17. In addition to the above, at the time and place of the attack in question, Defendants knew that the dog was an abnormally dangerous animal. Defendants knew or had reason to know that the dog that attacked Plaintiff **RICKIE HERRING** and Plaintiffs’ dog had dangerous propensities abnormal to the class (domestic animal). As such, Defendants are strictly liable for the attack and resulting injuries to Plaintiffs. Plaintiffs further plead that contributory negligence is not a defense to Plaintiffs’ strict liability claims. *Marshall v. Ranne* 511 S.W.2d 255 (Tex.1974).

GROSS NEGLIGENCE

18. Plaintiffs would show that the dog in question had exhibited dangerous and/or vicious behavior before the date of Plaintiffs’ injuries. Despite this, Defendants failed to take reasonable steps to restrain and/or monitor the dog. Furthermore, Defendants failed to adequately warn Plaintiffs of these vicious and/or dangerous propensities. Defendants’ callous and intentional disregard for the laws and ordinances of this State and County demonstrate a reckless disregard for the health, welfare and safety of others as well as a complete lack of remorse.

19. Defendants’ acts and/or omissions when viewed objectively from the standpoint of the actor at the time of occurrence involved an extreme degree of risk and/or a high probability of causing harm of a great magnitude to others. Defendants had actual, subjective awareness of the risk involved but, nevertheless chose to proceed with conscious indifference to the rights, safety and/or welfare of Plaintiffs and others. Said acts and/or omissions rise to the level of "malice" and “gross negligence” as same is defined by Tex.Civ.Prac.& Rem. Code §41.001 (1998). Therefore, Plaintiff is entitled to an amount of exemplary/punitive damages in accordance with the limits of Tex.Civ.Prac.& Rem. Code §41.001 et. seq (2000 supp).

STRICT LIABILITY

20. **Statutory.** At the time of the incident in question, Defendants had knowledge that Defendants’ dog had previously bitten and/or otherwise shown unprovoked aggression toward at least one other person. Thus, Defendants were aware and are charged with knowledge that the dog was indeed a dangerous dog as that term is understood under Texas Health and Safety Code Title 10,

Section 822.041(2)(A). Pursuant to Texas law, Defendants are strictly liable for any and all injuries done to Plaintiffs as a result of Defendants' dog's aggressive actions.

21. **Common Law.** At the time of the incident in question, Defendants had knowledge that Defendants' dog had previously bitten and/or otherwise shown unprovoked aggression toward at least one other person. Defendants, therefore, knew or had reason to know that the dog in question had dangerous propensities abnormal to the dog's class. (The dog's class being that of domesticated animals.) Under Texas common law, Defendants are strictly liable for the damages to Plaintiffs as a result of the conduct of Defendants' dog which Defendants knew or had reason to know had dangerous propensities abnormal to its class. *Bushnell v. Mott* 254 S.W.3d 451 (Tex.2008); *Marshall v. Ranne* 511 S.W.2d 255 (Tex.1974).

DAMAGES

22. Upon trial of this case, it will be shown that Plaintiffs were caused to sustain injuries and damages as a proximate result of Defendants' negligence, negligence per se and gross negligence. Defendants are further strictly liable for Plaintiffs' damages. Plaintiffs will request the Court and Jury to determine the amount of loss Plaintiffs have incurred in the past and will incur in the future, not only from a financial standpoint, but also in terms of good health and freedom from pain and worry. Plaintiffs are entitled to have the Jury in this case separately consider certain elements of damages provided by law, to determine the sum of money for each element that will fairly and reasonably compensate Plaintiffs for injuries, damages and losses incurred and to be incurred. Elements of damages from the date of the collision in question until the time of trial of this case are as follows:

- a. Physical pain that Plaintiffs suffered from the date of the incident in question to the time of trial.
- b. Mental anguish that Plaintiffs suffered from the date of the incident in question to the time of trial.
- c. Reasonable and necessary medical expenses incurred in the treatment of Plaintiffs' injuries from the date of the incident in question to the time of trial.
- d. Scarring and disfigurement suffered by Plaintiffs from the date of the incident in question to the time of trial.

- e. Physical impairment suffered by Plaintiffs from the date of the incident in question to the time of trial.
 - f. Lost wages and loss of wage-earning capacity sustained by Plaintiff **RICKIE HERRING** from the date of the collision in question to the time of trial.
 - g. Miscellaneous expenses.
 - h. The fair market value of Plaintiffs' dog.
23. Elements of damages in the future beyond the trial are as follows:
- a. Physical pain that Plaintiffs will suffer in the future beyond the time of trial.
 - b. Mental anguish that Plaintiffs will suffer in the future beyond the time of trial.
 - c. Reasonable and necessary medical expenses incurred in the treatment of Plaintiffs' injuries in the future beyond the time of trial.
 - d. Scarring and disfigurement suffered by Plaintiffs in the future beyond the time of trial.
 - e. Physical impairment suffered by Plaintiffs in the future beyond the time of trial.
 - f. Lost wages and loss of earning capacity in the future beyond the time of trial as a result of the injuries sustained in the collision in question.

24. Plaintiff **RICKIE HERRING** was born on September 17, 1949. According to the U.S. Life Tables (2015) U.S. Department of Vital Statistics (attached), Plaintiff has an additional 15.6 years within which to live. Plaintiff hereby requests this Honorable Court to take Judicial Notice of same, pursuant to Article II of the Texas Rules of Evidence.

25. Plaintiff **DIANA HERRING** was born on September 2, 1943. According to the U.S. Life Tables (2015) U.S. Department of Vital Statistics (attached), Plaintiff has an additional 11.6 years within which to live. Plaintiff hereby requests this Honorable Court to take Judicial Notice of same, pursuant to Article II of the Texas Rules of Evidence.

PRAYER

26. Plaintiffs have been damaged and will be damaged in a sum equal to an amount within the jurisdictional limits of this Court, for which Plaintiffs now bring suit.

27. Plaintiffs seek monetary relief over \$200,000.00 but not more than \$1,000,000.00.

28. Plaintiffs reserve the right to amend the above monetary amounts after the full nature and extent of Defendants' negligence and Plaintiffs' injuries and damages have been determined. Plaintiffs also reserve the right to amend the above amount after the verdict is returned in this case.

29. WHEREFORE, Plaintiffs pray:

- a. that Defendants be cited to appear and answer herein;
- b. that upon final trial Plaintiffs recover actual damages and exemplary/punitive damages specified above, plus costs of Court and prejudgment and post-judgment interest at the legal rate; and
- c. that Plaintiffs have all other relief, legal and equitable, to which Plaintiffs are entitled.

Respectfully submitted,

SIMMONS & FLETCHER, P.C.



Rebecca L. Todd
Bar No: 24101040
9821 Katy Freeway
Suite 925
Houston, Texas 77024
Telephone: 713/932-0777
Telecopier: 713/935-1410
rtodd@simmonsandfletcher.com
ATTORNEY FOR PLAINTIFFS

United States Life Tables, 2015

by Elizabeth Arias, Ph.D., and Jiaquan Xu, M.D., Division of Vital Statistics

Abstract

Objectives—This report presents complete period life tables for the United States by race, Hispanic origin, and sex, based on age-specific death rates in 2015.

Methods—Data used to prepare the 2015 life tables are 2015 final mortality statistics; July 1, 2015, population estimates based on the 2010 decennial census; and 2015 Medicare data for persons aged 66–99. The methodology used to estimate the life tables for the Hispanic population remains unchanged from that developed for the publication of life tables by Hispanic origin for data year 2006. The methodology used to estimate the 2015 life tables for all other groups was first implemented with data year 2008.

Results—In 2015, the overall expectation of life at birth was 78.7 years, decreasing by 0.2 year from 2014. From 2014 to 2015, life expectancy at birth decreased by 0.2 year for both males (76.5 to 76.3) and females (81.3 to 81.1). Life expectancy at birth decreased by 0.2 year for the white population (79.1 to 78.9) and by 0.1 year for the black population (75.6 to 75.5). Life expectancy at birth decreased by 0.2 year for the Hispanic population (82.1 to 81.9) and for the non-Hispanic black population (75.3 to 75.1). Life expectancy at birth decreased by 0.1 year for the non-Hispanic white population (78.8 to 78.7).

Keywords: life expectancy • survival • death rates • race • Hispanic origin

Introduction

There are two types of life tables: the cohort (or generation) life table and the period (or current) life table. The cohort life table presents the mortality experience of a particular birth cohort—all persons born in the year 1900, for example—from the moment of birth through consecutive ages in successive calendar years. Based on age-specific death rates observed through consecutive calendar years, the cohort life table reflects the mortality experience of an actual cohort from birth until no lives remain in the group. To prepare just a single complete cohort life table requires data over many years. It is usually not feasible to construct cohort life tables entirely on the basis of observed data for real cohorts due to data unavailability or

incompleteness (1). For example, a life table representation of the mortality experience of a cohort of persons born in 1970 would require the use of data projection techniques to estimate deaths into the future (2,3).

Unlike the cohort life table, the period life table does not represent the mortality experience of an actual birth cohort. Rather, the period life table presents what would happen to a hypothetical cohort if it experienced throughout its entire life the mortality conditions of a particular period in time. For example, a period life table for 2015 assumes a hypothetical cohort that is subject throughout its lifetime to the age-specific death rates prevailing for the actual population in 2015. The period life table may thus be characterized as rendering a snapshot of current mortality experience and shows the long-range implications of a set of age-specific death rates that prevailed in a given year. In this report, the term “life table” refers only to the period life table and not to the cohort life table.

Life tables can be classified in two ways, according to the length of the age interval in which data are presented. A complete life table contains data for every single year of age. An abridged life table typically contains data by 5- or 10-year age intervals. A complete life table can easily be aggregated into 5- or 10-year age groups (see [Technical Notes](#) for instructions). Other than the decennial life tables, U.S. life tables based on data prior to 1997 are abridged life tables constructed by reference to a standard table (4). This report presents complete period life tables by race, Hispanic origin, and sex.

Data and Methods

The data used to prepare the U.S. life tables for 2015 are final numbers of deaths for the year 2015; July 1, 2015 population estimates based on the 2010 decennial census; and age-specific death and population counts for Medicare beneficiaries aged 66–99 for the year 2015 from the Centers for Medicare & Medicaid Services. Data from the Medicare program are used to supplement vital statistics and census data for ages 66 and over. The U.S. life tables by Hispanic origin are based on death rates that have been adjusted for race and ethnicity misclassification on death certificates using classification ratios (or correction factors) generated from an updated evaluation of race and Hispanic origin misclassification on

death certificates in the United States (5). (See [Technical Notes](#) for a detailed description of the data sets and methodology used to estimate Hispanic-origin life tables.)

Expectation of life

The most frequently used life table statistic is life expectancy (e_x), which is the average number of years of life remaining for persons who have attained a given age (x). Life expectancy and other life table values for each age in 2015 are shown for the total population by race, Hispanic origin, and sex in [Tables 1–18](#). Life expectancy is summarized by age, race, Hispanic origin, and sex in [Table A](#).

Life expectancy at birth (e_0) for 2015 for the total population was 78.7 years. This represents the average number of years that the members of the hypothetical life table cohort can expect to live at the time of birth ([Table A](#)).

Survivors to specified ages

Another way of assessing the longevity of the period life table cohort is by determining the proportion that survives to specified ages. The l_x column of the life table provides the data for computing this proportion. [Table B](#) summarizes the number of survivors by age, race, Hispanic origin, and sex. To illustrate, 57,811 persons out of the original 2015 hypothetical life table cohort of 100,000 (or 57.8%) were alive at exact age 80. In other words, the probability that a person will survive from birth to age 80, given 2015 age-specific mortality, is 57.8%. Probabilities of survival can be calculated at any age by simply dividing the number of survivors at the terminal age by the number at the beginning age. For example, to calculate the probability of surviving from age 20 to age 85, divide the number of survivors at age 85 (42,192) by the number of survivors at age 20 (98,943), which results in a 42.6% probability of survival.

Explanation of life table columns

Column 1. Age (between x and $x + 1$)—Shows the age interval between the two exact ages indicated. For instance, “20–21” means the 1-year interval between the 20th and 21st birthdays.

Column 2. Probability of dying (q_x)—Shows the probability of dying between ages x and $x + 1$. For example, for males in the age interval 20–21 years, the probability of dying is 0.001095 ([Table 2](#)). This column forms the basis of the life table; all subsequent columns are derived from it.

Column 3. Number surviving (l_x)—Shows the number of persons from the original hypothetical cohort of 100,000 live births who survive to the beginning of each age interval. The l_x values are computed from the q_x values, which are successively applied to the remainder of the original 100,000 persons still alive at the beginning of each age interval. Thus, out of 100,000 female babies born alive, 99,462 will complete the first year of life and enter the second; 99,326 will reach age 10; 99,121 will reach age 20; and 48,948 will live to age 85 ([Table 3](#)).

Column 4. Number dying (d_x)—Shows the number dying in each successive age interval out of the original 100,000 live births. For example, out of 100,000 males born alive, 639 will die in the first year of life; 108 between ages 20 and 21; and 999 after reaching age

100 ([Table 2](#)). Each figure in column 4 is the difference between two successive figures in column 3.

Column 5. Person-years lived (L_x)—Shows the number of person-years lived by the hypothetical life table cohort within an age interval x to $x + 1$. Each figure in column 5 represents the total time (in years) lived between two indicated birthdays by all those reaching the earlier birthday. Thus, the figure 98,720 for males in the age interval 20–21 is the total number of years lived between the 20th and 21st birthdays by the 98,774 males (column 3) who reached their 20th birthday out of 100,000 males born alive ([Table 2](#)).

Column 6. Total number of person-years lived (T_x)—Shows the total number of person-years that would be lived after the beginning of the age interval x to $x + 1$ by the hypothetical life table cohort. For example, the figure 5,646,558 is the total number of years lived after attaining age 20 by the 98,774 males reaching that age ([Table 2](#)).

Column 7. Expectation of life (e_x)—The expectation of life at any given age is the average number of years remaining to be lived by those surviving to that age, based on a given set of age-specific rates of dying. It is derived by dividing the total person-years that would be lived beyond age x by the number of persons who survived to that age interval (T_x/l_x). Thus, the average remaining lifetime for males who reach age 20 is 57.2 years (5,646,558 divided by 98,774) ([Table 2](#)).

Results

Life expectancy in the United States

[Tables 1–18](#) show complete life tables for 2015 by race (white and black), Hispanic origin, and sex. [Table A](#) summarizes life expectancy by age, race, Hispanic origin, and sex. Life expectancy at birth for 2015 represents the average number of years that a group of infants would live if they were to experience throughout life the age-specific death rates prevailing in 2015. In 2015, life expectancy at birth was 78.7 years, decreasing by 0.2 year from 2014.

Changes in mortality by age and cause of death can have a major effect on life expectancy. Life expectancy at birth decreased by 0.2 year in 2015 from 2014 primarily because of increases in mortality from unintentional injuries, Alzheimer’s disease, homicide, Chronic lower respiratory diseases (CLRD), and suicide. The decrease in life expectancy was slightly offset by decreases in mortality from cancer and Influenza and pneumonia. Life expectancy at birth for both males and females decreased by 0.2 year from 2014 to 2015. For males, the decrease was due to increases in mortality from unintentional injuries, homicide, Alzheimer’s disease, and suicide. These increases were offset somewhat by decreases in mortality from cancer and Influenza and pneumonia. For females, the decrease was due to increases in mortality from Alzheimer’s disease, unintentional injuries, CLRD, heart disease, and stroke, which were offset by decreases in mortality from cancer and Influenza and pneumonia (6).

The difference in life expectancy between the sexes was 4.8 years in 2015, unchanged from the difference in 2014. From 1900 to 1975, the difference in life expectancy between the sexes increased from 2.0 years to 7.8 years ([Table 19](#)). The increasing gap during these years is attributed to increases in male mortality due to ischemic heart disease and lung cancer, both of which increased largely as the result of men’s early and widespread adoption of

Table A. Expectation of life, by age, race, Hispanic origin, race for the non-Hispanic population, and sex: United States, 2015

Age (years)	All races and origins						White			Black			Hispanic ¹			Non-Hispanic white ¹			Non-Hispanic black ¹		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
	0.....	78.7	76.3	81.1	78.9	76.6	81.3	75.5	72.2	78.5	81.9	79.3	84.3	78.7	76.3	81.0	75.1	71.9	78.1	75.1	71.9
1.....	78.2	75.8	80.5	78.3	76.0	80.6	75.3	72.1	78.3	81.3	78.7	83.7	78.1	75.7	80.4	75.0	71.8	77.9	75.0	71.8	77.9
5.....	74.3	71.9	76.6	74.4	72.1	76.7	71.5	68.3	74.4	77.4	74.8	79.7	74.1	71.8	76.4	71.1	67.9	74.0	71.1	67.9	74.0
10.....	69.3	66.9	71.7	69.4	67.1	71.7	66.5	63.3	69.4	72.4	69.8	74.8	69.2	66.9	71.5	66.1	62.9	69.1	66.1	62.9	69.1
15.....	64.4	62.0	66.7	64.5	62.2	66.8	61.6	58.4	64.5	67.5	64.9	69.8	64.2	61.9	66.5	61.2	58.0	64.1	61.2	58.0	64.1
20.....	59.5	57.2	61.8	59.6	57.3	61.9	56.8	53.7	59.6	62.6	60.0	64.9	59.4	57.1	61.6	56.4	53.3	59.3	56.4	53.3	59.3
25.....	54.8	52.5	56.9	54.8	52.7	57.0	52.1	49.2	54.7	57.8	55.3	60.0	54.6	52.4	56.7	51.8	48.9	54.4	51.8	48.9	54.4
30.....	50.0	47.9	52.1	50.1	48.0	52.2	47.5	44.7	49.9	53.0	50.6	55.1	49.9	47.8	51.9	47.2	44.4	49.6	47.2	44.4	49.6
35.....	45.3	43.3	47.3	45.4	43.4	47.4	42.9	40.2	45.2	48.2	45.9	50.3	45.2	43.2	47.2	42.6	39.9	44.9	42.6	39.9	44.9
40.....	40.7	38.7	42.5	40.7	38.8	42.6	38.3	35.8	40.5	43.5	41.2	45.4	40.6	38.7	42.4	38.1	35.5	40.3	38.1	35.5	40.3
45.....	36.1	34.2	37.9	36.1	34.3	37.9	33.8	31.4	36.0	38.8	36.6	40.6	36.0	34.1	37.8	33.6	31.1	35.7	33.6	31.1	35.7
50.....	31.6	29.8	33.3	31.6	29.9	33.3	29.5	27.1	31.6	34.2	32.0	35.9	31.5	29.8	33.2	29.3	26.9	31.3	29.3	26.9	31.3
55.....	27.3	25.6	28.9	27.3	25.7	28.9	25.4	23.2	27.3	29.7	27.7	31.3	27.3	25.6	28.8	25.3	23.0	27.2	25.3	23.0	27.2
60.....	23.2	21.7	24.6	23.2	21.7	24.6	21.7	19.6	23.4	25.5	23.6	26.9	23.2	21.7	24.5	21.5	19.4	23.2	21.5	19.4	23.2
65.....	19.3	18.0	20.5	19.3	18.0	20.5	18.2	16.4	19.6	21.4	19.7	22.6	19.3	18.0	20.4	18.1	16.2	19.5	18.1	16.2	19.5
70.....	15.6	14.4	16.6	15.6	14.4	16.5	14.9	13.3	16.0	17.5	16.0	18.5	15.5	14.4	16.5	14.8	13.2	15.9	14.8	13.2	15.9
75.....	12.2	11.2	13.0	12.1	11.2	12.9	11.9	10.6	12.7	13.9	12.6	14.6	12.1	11.1	12.9	11.8	10.5	12.7	11.8	10.5	12.7
80.....	9.1	8.3	9.7	9.1	8.3	9.6	9.2	8.2	9.7	10.5	9.5	11.1	9.1	8.3	9.6	9.1	8.1	9.7	9.1	8.1	9.7
85.....	6.6	5.9	7.0	6.5	5.9	6.9	6.9	6.1	7.2	7.7	7.7	8.0	6.5	5.9	6.9	6.8	6.1	7.2	6.8	6.1	7.2
90.....	4.6	4.1	4.8	4.5	4.0	4.7	5.0	4.5	5.2	5.4	4.7	5.5	4.5	4.0	4.7	5.0	4.5	5.2	5.0	4.5	5.2
95.....	3.2	2.8	3.3	3.1	2.7	3.2	3.7	3.3	3.8	3.7	3.3	3.8	3.1	2.7	3.2	3.7	3.3	3.8	3.7	3.3	3.8
100.....	2.2	2.0	2.3	2.2	2.0	2.2	2.7	2.4	2.7	2.7	2.3	2.6	2.2	2.0	2.2	2.7	2.5	2.7	2.2	2.0	2.7

¹Life tables by Hispanic origin are based on death rates that have been adjusted for race and ethnicity misclassification on death certificates. Updated classification ratios were applied; see Technical Notes. SOURCE: NCHS, National Vital Statistics System, Mortality.

cigarette smoking (7,8). Between 1979 and 2010, the difference in life expectancy between the sexes narrowed from 7.8 years to 4.8 years (Table 19). The general decline in the sex difference since 1979 reflects proportionately greater increases in lung cancer mortality for women than for men and proportionately larger decreases in heart disease mortality among men (7,8).

The 2015 life table may be used to compare life expectancy at any age from birth onward. On the basis of mortality experienced in 2015, a person aged 65 could expect to live an average of 19.3 more years for a total of 84.3 years; a person aged 85 could expect to live an additional 6.6 years for a total of 91.6 years; and a person aged 100 could expect to live an additional 2.2 years, on average (Table A).

Life expectancy by race

From 2014 to 2015, life expectancy decreased by 0.1 year for the black (75.6 to 75.5) and 0.2 year for the white (79.1 to 78.9) populations (Table 19). The difference in life expectancy between the white and black populations was 3.4 years in 2015, a historically record low level. The white-black difference in life expectancy narrowed from 14.6 years in 1900 to 5.7 years in 1982, but increased to 7.1 years in 1993 before beginning to decline again in 1994 (Table 19). The increase in the gap from 1983 to 1993 was largely the result of increases in mortality among the black male population due to HIV infection and homicide (8).

Among the four race-sex groups, white females continued to have the highest life expectancy at birth (81.3 years), followed by

black females (78.5), white males (76.6), and black males (72.2) (Figure 1). Between 2014 and 2015, life expectancy decreased by 0.3 years for black males (72.5 to 72.2). It remained unchanged for black females (78.5). Black males experienced a decline in life expectancy every year for 1984–1989 (8), followed by annual increases in 1990–1992 and 1994–2012. Between 2014 and 2015, life expectancy declined by 0.1 year for white males (76.7 to 76.6) and for white females (81.4 to 81.3). Overall, gains in life expectancy from 1980 through 2015 were 8.4 years for black males, 6.0 years for black females, 5.9 years for white males, and 3.2 years for white females (Table 19).

Life expectancy by Hispanic origin

From 2014 to 2015, life expectancy decreased by 0.2 year for the Hispanic population (82.1 to 81.9) and the non-Hispanic black population (75.3 to 75.1). It decreased by 0.1 year for the non-Hispanic white population (78.8 to 78.7) (Table 19). In 2015, the Hispanic population had a life expectancy advantage at birth of 3.2 years over the non-Hispanic white population and 6.8 years over the non-Hispanic black population. The U.S. life tables by Hispanic origin are based on death rates that have been adjusted for race and ethnicity misclassification on death certificates (see Technical Notes for a detailed description of the methodology).

Among the six Hispanic-origin race-sex groups, Hispanic females continued to have the highest life expectancy at birth (84.3

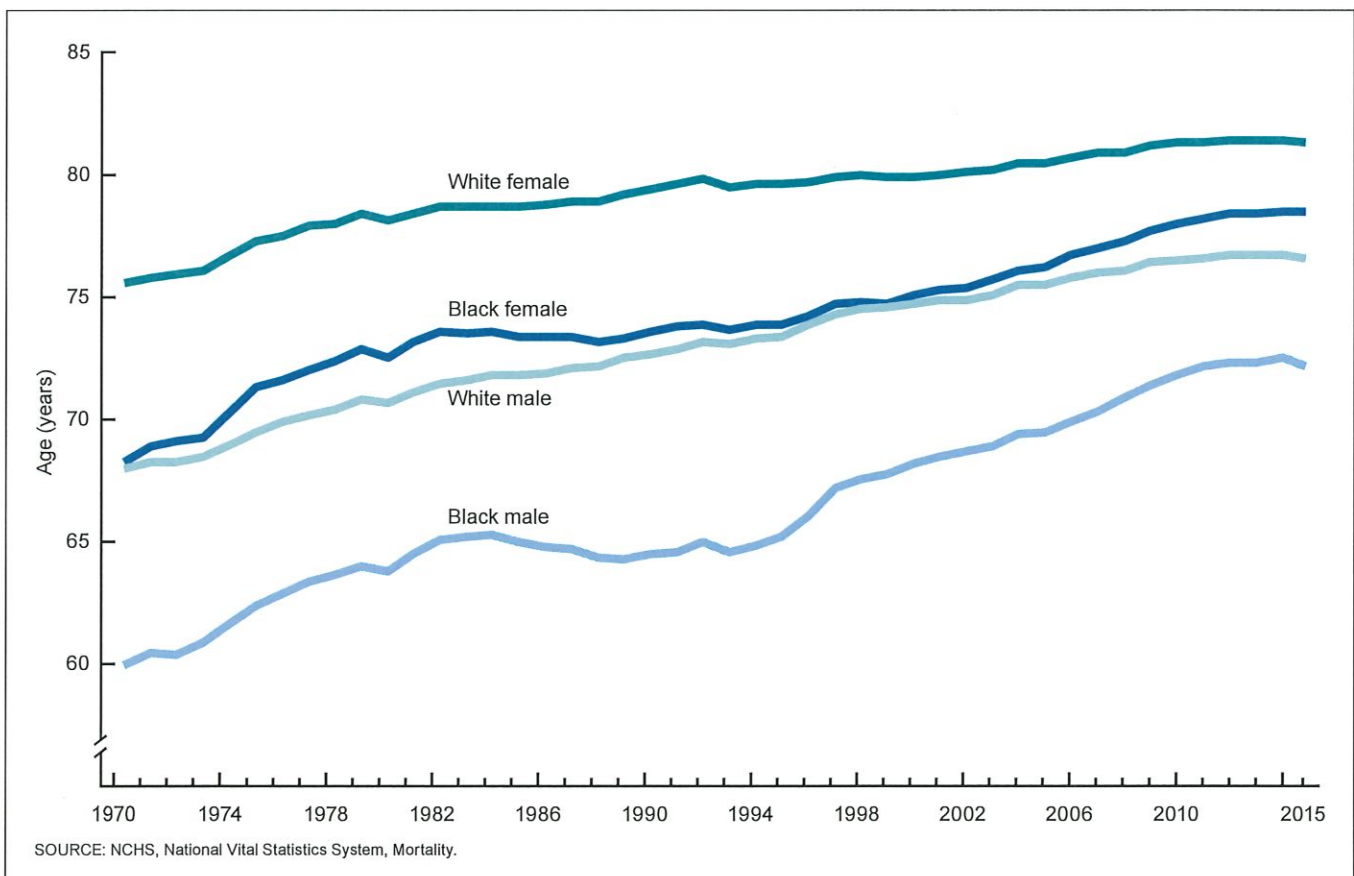


Figure 1. Life expectancy at birth, by race and sex: United States, 1970–2015

years), followed by non-Hispanic white females (81.0), Hispanic males (79.3), non-Hispanic black females (78.1), non-Hispanic white males (76.3), and non-Hispanic black males (71.9) (Figure 2). The smallest difference is between Hispanic males and non-Hispanic black females, with Hispanic males having an advantage of 1.2 years. The largest difference is between Hispanic females and non-Hispanic black males, with Hispanic females having a life expectancy at birth 12.4 years greater.

The Hispanic mortality advantage is also evident in the effect produced on life expectancy at birth when race and Hispanic origin are considered separately. Until 2006, U.S. life tables were produced only by race (white and black), regardless of Hispanic origin. When the Hispanic population is excluded from the two race groups and only the non-Hispanic black and non-Hispanic white populations are included, life expectancy at birth declines. For example, for the black population, regardless of Hispanic origin, life expectancy at birth was 75.5 years in 2015 but was 75.1 years when only the non-Hispanic segment of the black population was included. Similarly, life expectancy for the white population, irrespective of Hispanic origin, was 78.9 years in 2015, but was 78.7 years when only the non-Hispanic segment of the white population was included. The effect of the Hispanic mortality advantage on race-specific life expectancy was also observed for each race-sex group. (See [Technical Notes](#) for a detailed description of the methodology used to estimate the Hispanic-origin life tables.)

Survivorship in the United States

Table B summarizes the number of survivors out of 100,000 persons born alive (l_x) by age, race, Hispanic origin, and sex for 2015. Table 20 shows trends in survivorship from 1900 to 2015. In 2015, 99.4% of all infants born in the United States survived the first year of life. In contrast, 87.6% of infants born in 1900 survived the first year. Of the 2015 period life table cohort, 57.8% survived to age 80 and 1.9% survived to age 100. In 1900, 13.5% of the life table cohort survived to age 80 and 0.03% survived to age 100 (Table 20).

Survivorship by race

Among the four race-sex groups, white females have the highest median age at death, with about 52.6% surviving to age 84 (Tables 4–9). Of the original hypothetical cohort of 100,000 infant white females, 99.2% survive to age 20, 88.2% survive to age 65, and 49.1% survive to age 85 (Table 6). White males have slightly higher survival rates than black females at the younger ages, with 98.9% surviving to age 20 compared with 98.5% of black females (Tables 5 and 9). At the older ages, however, black female survival surpasses white male survival. By age 85, white male survival is 35.6% compared with 42.0% for black females. The median age at death for black males is close to 76 years, about 8 years less than that for white females (Table 8). Among black males, 97.9% survive to age 20, 72.5% to age 65, and 26.2% to age 85. By age 100, there is very little difference between the white and black populations in

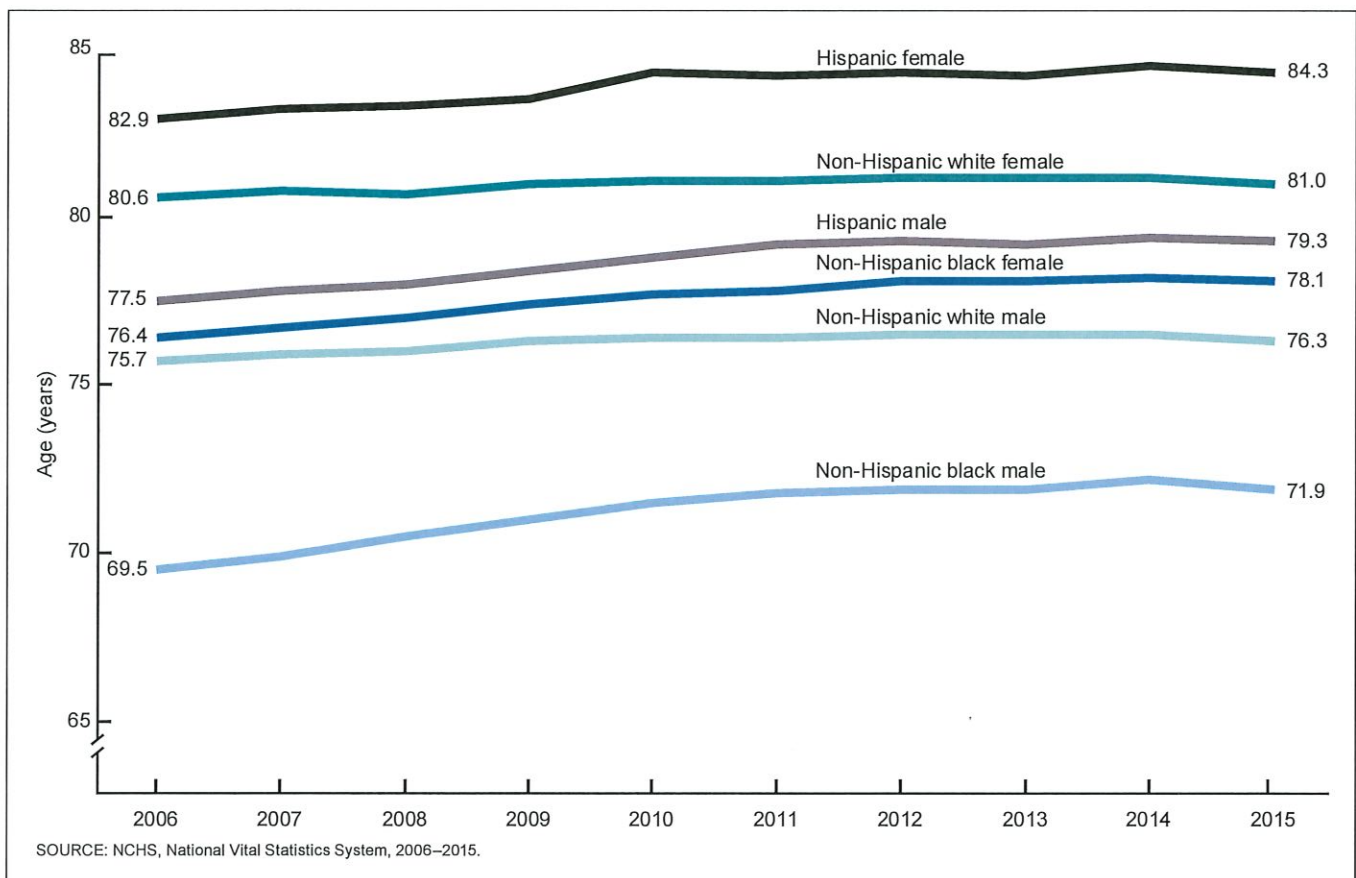


Figure 2. Life expectancy at birth, by Hispanic origin, race, and sex: United States, 2006–2015

Table B. Number of survivors out of 100,000 born alive, by age, race, Hispanic origin, race for non-Hispanic population, and sex: United States, 2015

Age (years)	All races and origins						White			Black			Hispanic ¹			Non-Hispanic white ¹			Non-Hispanic black ¹			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
	0.....	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1.....	99,411	99,361	99,462	99,508	99,467	99,551	98,861	98,760	98,966	99,503	99,465	99,543	99,510	99,467	99,556	99,510	99,467	99,556	99,510	99,467	99,556	99,510
5.....	99,312	99,250	99,376	99,419	99,368	99,473	96,708	96,580	96,840	99,426	99,381	99,474	99,420	99,358	99,486	99,420	99,358	99,486	99,420	99,358	99,486	99,420
10.....	99,254	99,185	99,326	99,365	99,307	99,426	96,626	96,488	96,767	99,379	99,327	99,436	99,366	99,293	99,443	99,366	99,293	99,443	99,366	99,293	99,443	99,366
15.....	99,181	99,101	99,265	99,296	99,228	99,367	96,529	96,373	96,691	99,322	99,263	99,387	99,294	99,204	99,389	99,294	99,204	99,389	99,294	99,204	99,389	99,294
20.....	98,943	98,774	99,121	99,072	98,928	99,222	96,194	96,068	96,532	99,132	99,006	99,267	99,066	98,903	99,239	99,066	98,903	99,239	99,066	98,903	99,239	99,066
25.....	98,503	98,135	98,891	98,652	98,328	98,995	97,574	96,926	96,247	98,785	98,509	99,068	98,637	98,293	99,001	98,637	98,293	99,001	98,637	98,293	99,001	98,637
30.....	97,980	97,399	98,591	98,137	97,612	98,693	96,863	95,878	97,871	98,403	97,954	98,898	98,087	97,533	98,669	98,087	97,533	98,669	98,087	97,533	98,669	98,087
35.....	97,357	96,569	98,179	97,518	96,794	98,284	96,021	94,720	97,329	97,970	97,369	98,634	97,417	96,647	98,222	97,417	96,647	98,222	97,417	96,647	98,222	97,417
40.....	96,609	95,615	97,640	96,782	95,862	97,754	94,972	93,348	96,579	97,465	96,686	98,318	96,618	95,640	97,638	96,618	95,640	97,638	96,618	95,640	97,638	96,618
45.....	95,619	94,409	96,867	95,808	94,674	96,999	93,595	91,674	95,473	96,782	95,785	97,860	95,571	94,377	96,813	95,571	94,377	96,813	95,571	94,377	96,813	95,571
50.....	94,158	92,657	95,700	94,374	92,952	95,864	91,622	89,341	93,833	95,733	94,481	97,063	94,065	92,586	95,601	94,065	92,586	95,601	94,065	92,586	95,601	94,065
55.....	91,867	89,881	93,895	92,125	90,218	94,109	88,560	85,685	91,320	94,069	92,382	95,871	91,737	89,781	93,758	91,737	89,781	93,758	91,737	89,781	93,758	91,737
60.....	88,559	85,842	91,312	88,900	86,274	91,612	84,017	80,218	87,630	91,620	89,243	94,114	88,434	85,769	91,173	88,434	85,769	91,173	88,434	85,769	91,173	88,434
65.....	84,055	80,330	87,800	84,518	80,922	88,204	77,782	72,521	82,709	88,009	84,731	91,362	84,004	80,383	87,711	84,004	80,383	87,711	84,004	80,383	87,711	84,004
70.....	78,066	73,317	82,827	78,581	73,995	83,268	70,220	63,506	76,456	83,120	78,665	87,539	78,048	73,467	82,734	78,048	73,467	82,734	78,048	73,467	82,734	78,048
75.....	69,559	63,777	75,340	70,065	64,463	75,765	60,498	52,519	67,857	76,144	70,358	81,715	69,515	63,951	75,193	69,515	63,951	75,193	69,515	63,951	75,193	69,515
80.....	57,811	51,163	64,422	58,217	51,743	64,752	48,499	39,756	56,513	66,261	59,315	72,769	57,655	51,245	64,150	57,655	51,245	64,150	57,655	51,245	64,150	57,655
85.....	42,192	35,290	48,948	42,381	35,608	49,097	34,490	26,155	42,015	52,073	44,186	59,091	41,886	35,194	48,548	41,886	35,194	48,548	41,886	35,194	48,548	41,886
90.....	24,285	18,475	29,772	24,255	18,550	29,718	20,023	13,658	25,628	34,005	26,372	40,204	23,921	18,295	29,334	23,921	18,295	29,334	23,921	18,295	29,334	23,921
95.....	9,292	6,037	12,204	9,091	5,895	11,966	8,516	4,982	11,474	15,951	10,553	19,669	8,951	5,797	11,794	8,951	5,797	11,794	8,951	5,797	11,794	8,951
100.....	1,935	999	2,724	1,809	914	2,566	2,334	1,110	3,273	4,511	2,335	5,681	1,781	896	2,529	1,781	896	2,529	1,781	896	2,529	1,781

¹Life tables by Hispanic origin are based on death rates that have been adjusted for race and ethnicity misclassification on death certificates. Updated classification ratios were applied; see Technical Notes. SOURCE: NCHS, National Vital Statistics System, Mortality.

terms of survival. For example, 0.9% of white males, 1.1% of black males, 2.6% of white females, and 3.3% of black females survive to age 100.

Survivorship by Hispanic origin

In 2015, 99.5% of Hispanic and non-Hispanic white infants survived the first year of life, compared with 98.9% of non-Hispanic black infants (Tables 10–19). For both the Hispanic and non-Hispanic white populations, 99.1% survived to age 20, while 98.1% of the non-Hispanic black population survived to age 20. By age 65, the Hispanic population has a clear survival advantage compared with the other two populations. Overall, 88.0% of the Hispanic population survived to age 65, compared with 84.0% of the non-Hispanic white and 77.1% of the non-Hispanic black populations. The Hispanic survival advantage increases with age so that by age 85, 52.1% of the Hispanic population has survived, compared with 41.9% of the non-Hispanic white and 33.7% of the non-Hispanic black populations.

Among the six Hispanic-origin race-sex groups, Hispanic females have the highest median age at death, with 48.3% surviving to age 88 (Figure 3). The group with the next highest median age at death is non-Hispanic white females, with 48.5% surviving to age 85. Hispanic males had 50.7% surviving to age 83, followed by non-Hispanic black females with 50.2% surviving to age 82, non-Hispanic white males with 48.3% surviving to age 81, and finally non-Hispanic black males with 49.2% surviving to age 76 (see Technical Notes).

References

1. Shryock HS, Siegel JS, Larmon EA. The methods and materials of demography, vol 2. U.S. Bureau of the Census. Washington, DC: U.S. Government Printing Office. 1971.
2. Moriyama IM, Gustavus SO. Cohort mortality and survivorship, United States death-registration states, 1900–1968. National Center for Health Statistics. Vital Health Stat 3(16). 1972. Available from: https://www.cdc.gov/nchs/data/series/sr_03/sr03_016.pdf.
3. Preston SM, Heuveline P, Guillot M. Demography: Measuring and modeling population processes. Oxford: Blackwell Publishers. 2001.
4. Sirken MG. Comparison of two methods of constructing abridged life tables by reference to a “standard” table. National Center for Health Statistics. Vital Health Stat 2(4). 1966. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_004.pdf.
5. Arias E, Heron M, Hakes JK. The validity of race and Hispanic-origin reporting on death certificates in the United States: An update. Vital Health Stat 2(172). Hyattsville, MD: National Center for Health Statistics. 2016. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_172.pdf.
6. Murphy SL, Xu JQ, Kochanek KD, Curtin S, Arias E. Deaths: Final data for 2015. National Vital Statistics Reports; vol 66 no 6. Hyattsville, MD: National Center for Health Statistics. 2017. Available from: https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_06.pdf.
7. Waldron I. Recent trends in sex mortality ratios for adults in developed countries. Soc Sci Med 36(4):451–62. 1993.

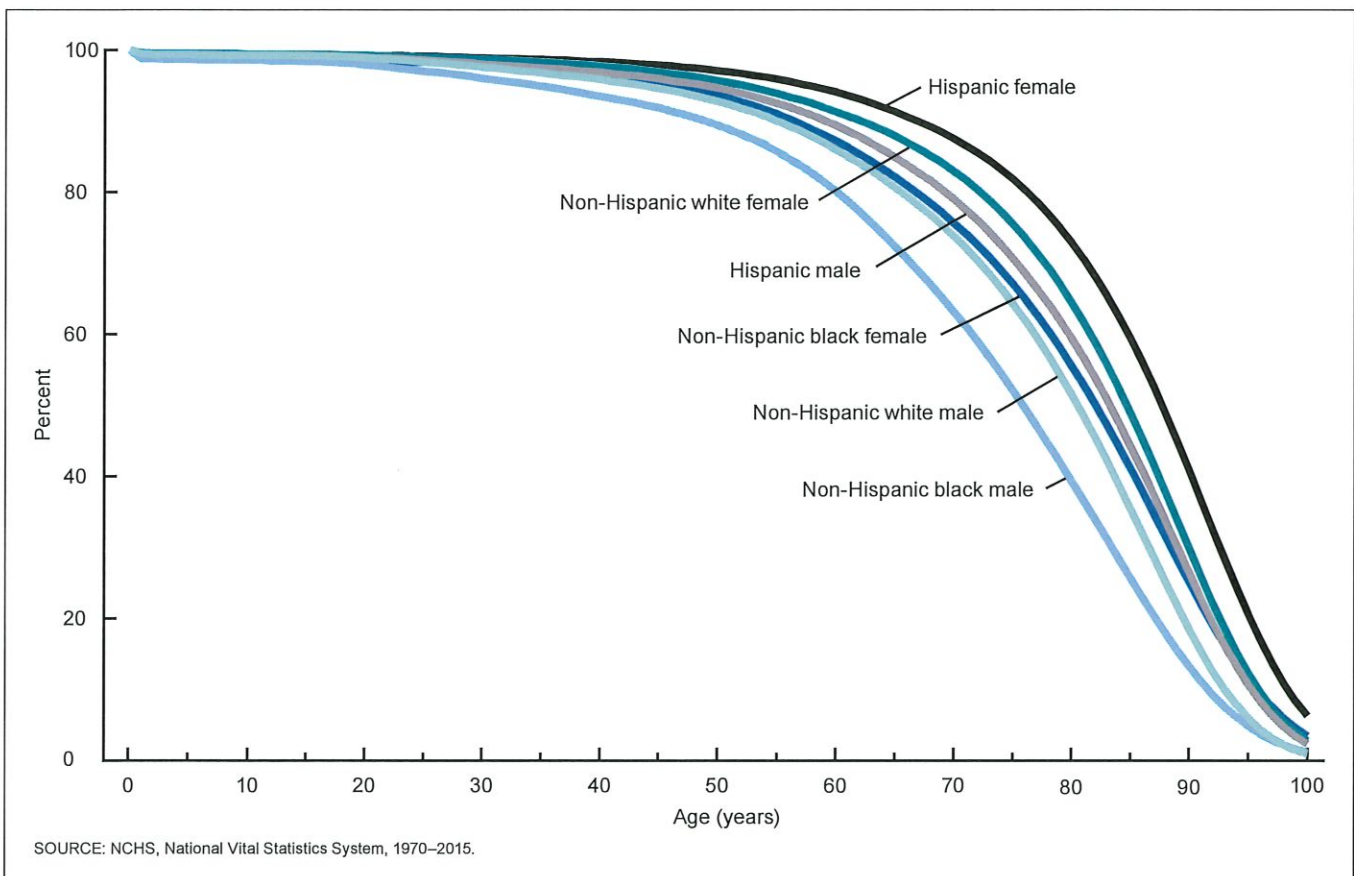


Figure 3. Percentage surviving, by Hispanic origin, race, age, and sex: United States, 2015

8. Kochanek KD, Maurer JD, Rosenberg HM. Causes of death contributing to changes in life expectancy: United States, 1984–89. National Center for Health Statistics. *Vital Health Stat* 20(23). 1994. Available from: https://www.cdc.gov/nchs/data/series/sr_20/sr20_023.pdf.
9. Anderson RN. A method for constructing complete annual U.S. life tables. National Center for Health Statistics. *Vital Health Stat* 2(129). 1999. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_129.pdf.
10. Arias E, Rostron BL, Tejada-Vera B. United States life tables, 2005. National Vital Statistics Reports; vol 58 no 10. Hyattsville, MD: National Center for Health Statistics. 2010. Available from: https://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_10.pdf.
11. Arias E. United States life tables, 2008. National Vital Statistics Reports; vol 61 no 3. Hyattsville, MD: National Center for Health Statistics. Available from: https://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_03.pdf.
12. Arias E. United States life tables by Hispanic origin. National Center for Health Statistics. *Vital Health Stat* 2(152). 2010. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_152.pdf.
13. Arias E, Schauman WS, Eschbach K, Sorlie PD, Backlund E. The validity of race and Hispanic origin reporting on death certificates in the United States. National Center for Health Statistics. *Vital Health Stat* 2(148). 2008. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_148.pdf.
14. Arias E, Eschbach K, Schauman WS, Backlund EL, Sorlie PD. The Hispanic mortality advantage and ethnic misclassification on U.S. death certificates. *Am J Public Health* 100(Suppl 1):S171–7. 2010.
15. Arias E. United States life tables, 2009. National Vital Statistics Reports; vol 62 no 7. Hyattsville, MD: National Center for Health Statistics. 2015. Available from: https://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_07.pdf.
16. Greville TNE, Carlson GA. Estimated average length of life in the death-registration states. National Center for Health Statistics. *Vital statistics—Special reports* 33(9). Washington, DC: Public Health Service. 1951.
17. Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. *Fed Regist* 62(210):58782–90. 1997. Available from: https://www.whitehouse.gov/omb/fedreg_1997standards.
18. Office of Management and Budget. Race and ethnic standards for federal statistics and administrative reporting. Statistical Policy Directive 15. 1977. Available from: <https://wonder.cdc.gov/WONDER/help/populations/bridged-race/Directive15.html>.
19. Ingram DD, Parker JD, Schenker N, Weed JA, Hamilton B, Arias E, Madans JH. United States Census 2000 population with bridged race categories. National Center for Health Statistics. *Vital Health Stat* 2(135). 2003. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_135.pdf.
20. U.S. Census Bureau. Age, sex, race, and Hispanic origin information from the 1990 census: A comparison of census results with results where age and race have been modified, 1990. CPH–L–74. Washington, DC: U.S. Department of Commerce. 1991.
21. Bell FC, Miller ML. Life tables for the United States Social Security Area 1900–2100. SSA Pub. No. 11–11536. Baltimore, MD: Social Security Administration, Office of the Chief Actuary. 2005.
22. Research Data Assistance Center. Introduction to the use of Medicare data for research. Minneapolis, MN: University of Minnesota School of Public Health. 2004.
23. National Center for Health Statistics. User guide to the 2015 period linked birth/infant death public use file. National Vital Statistics System. Available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/periodlinked/LinkPE15Guide.pdf.
24. National Center for Health Statistics. User guide to the 2016 period linked birth/infant death public use file. National Vital Statistics System. Available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/nativity/UserGuide2016.pdf.
25. Turra CM, Elo IT. The impact of salmon bias on the Hispanic mortality advantage: New evidence from Social Security data. *Popul Res Policy Rev* 27(5):515–30. 2008.
26. Chiang CL. The life table and its applications. Malabar, FL: Krieger Publishing. 1984.
27. Thatcher AR, Kannisto V, Vaupel JW. The force of mortality at ages 80 to 120. Odense, Denmark: Odense University Press. 1998.
28. Andreev KF, Bourbeau RR. Frailty modeling of Canadian and Swedish mortality at adult and advanced ages. Silver Spring, MD: Population Association of America. 2007.
29. Elo IT, Turra CM, Kestenbaum B, Fergusson BR. Mortality among elderly Hispanics in the United States: Past evidence and new results. *Demography* 41(1):109–28. 2004.
30. Brass W. On the scale of mortality. In: Brass W, ed., *Biological aspects of demography*. London: Taylor and Francis. 99–110. 1971.
31. Himes CL, Preston SH, Condran GA. A relational model of mortality at older ages in low mortality countries. *Popul Stud* 48(2):269–91. 1994.
32. Preston SH, Elo IT. Black mortality at very old ages in official U.S. life tables: A skeptical appraisal. *Popul Dev Rev* 32(3):557–65. 2006.

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Table 1. Life table for total population: United States, 2015Spreadsheet version available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/67_07/Table01.xlsx.

Age (years)	Probability of dying between ages x and $x + 1$	Number surviving to age x	Number dying between ages x and $x + 1$	Person-years lived between ages x and $x + 1$	Total number of person-years lived above age x	Expectation of life at age x
	q_x	l_x	d_x	L_x	T_x	e_x
0-1	0.005894	100,000	589	99,483	7,872,239	78.7
1-2	0.000403	99,411	40	99,391	7,772,756	78.2
2-3	0.000252	99,371	25	99,358	7,673,366	77.2
3-4	0.000193	99,345	19	99,336	7,574,008	76.2
4-5	0.000145	99,326	14	99,319	7,474,672	75.3
5-6	0.000143	99,312	14	99,305	7,375,353	74.3
6-7	0.000128	99,298	13	99,291	7,276,048	73.3
7-8	0.000116	99,285	11	99,279	7,176,757	72.3
8-9	0.000104	99,273	10	99,268	7,077,478	71.3
9-10	0.000095	99,263	9	99,258	6,978,210	70.3
10-11	0.000091	99,254	9	99,249	6,878,951	69.3
11-12	0.000098	99,245	10	99,240	6,779,702	68.3
12-13	0.000125	99,235	12	99,229	6,680,462	67.3
13-14	0.000174	99,222	17	99,214	6,581,234	66.3
14-15	0.000241	99,205	24	99,193	6,482,020	65.3
15-16	0.000314	99,181	31	99,166	6,382,827	64.4
16-17	0.000388	99,150	39	99,131	6,283,661	63.4
17-18	0.000473	99,112	47	99,088	6,184,530	62.4
18-19	0.000566	99,065	56	99,037	6,085,442	61.4
19-20	0.000660	99,009	65	98,976	5,986,405	60.5
20-21	0.000757	98,943	75	98,906	5,887,429	59.5
21-22	0.000846	98,868	84	98,827	5,788,523	58.5
22-23	0.000914	98,785	90	98,740	5,689,696	57.6
23-24	0.000958	98,694	95	98,647	5,590,957	56.6
24-25	0.000984	98,600	97	98,551	5,492,310	55.7
25-26	0.001004	98,503	99	98,454	5,393,758	54.8
26-27	0.001028	98,404	101	98,354	5,295,305	53.8
27-28	0.001056	98,303	104	98,251	5,196,951	52.9
28-29	0.001094	98,199	107	98,145	5,098,700	51.9
29-30	0.001138	98,092	112	98,036	5,000,555	51.0
30-31	0.001185	97,980	116	97,922	4,902,519	50.0
31-32	0.001232	97,864	121	97,804	4,804,597	49.1
32-33	0.001277	97,743	125	97,681	4,706,793	48.2
33-34	0.001318	97,619	129	97,554	4,609,112	47.2
34-35	0.001359	97,490	133	97,424	4,511,558	46.3
35-36	0.001408	97,357	137	97,289	4,414,134	45.3
36-37	0.001468	97,220	143	97,149	4,316,846	44.4
37-38	0.001535	97,077	149	97,003	4,219,697	43.5
38-39	0.001608	96,928	156	96,851	4,122,694	42.5
39-40	0.001690	96,773	164	96,691	4,025,843	41.6
40-41	0.001790	96,609	173	96,523	3,929,152	40.7
41-42	0.001909	96,436	184	96,344	3,832,630	39.7
42-43	0.002043	96,252	197	96,154	3,736,286	38.8
43-44	0.002191	96,055	210	95,950	3,640,132	37.9
44-45	0.002360	95,845	226	95,732	3,544,182	37.0
45-46	0.002541	95,619	243	95,497	3,448,450	36.1
46-47	0.002752	95,376	262	95,245	3,352,953	35.2
47-48	0.003018	95,113	287	94,970	3,257,708	34.3
48-49	0.003346	94,826	317	94,668	3,162,739	33.4
49-50	0.003717	94,509	351	94,333	3,068,071	32.5
50-51	0.004098	94,158	386	93,965	2,973,738	31.6
51-52	0.004481	93,772	420	93,562	2,879,773	30.7
52-53	0.004885	93,352	456	93,124	2,786,211	29.8
53-54	0.005319	92,896	494	92,649	2,693,088	29.0
54-55	0.005781	92,402	534	92,134	2,600,439	28.1
55-56	0.006271	91,867	576	91,579	2,508,304	27.3
56-57	0.006775	91,291	618	90,982	2,416,725	26.5
57-58	0.007291	90,673	661	90,342	2,325,743	25.6
58-59	0.007824	90,012	704	89,660	2,235,401	24.8
59-60	0.008383	89,307	749	88,933	2,145,741	24.0
60-61	0.008991	88,559	796	88,161	2,056,808	23.2

Table 1. Life table for total population: United States, 2015—Con.Spreadsheet version available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/67_07/07Table01.xlsx.

Age (years)	Probability of dying between ages x and $x + 1$	Number surviving to age x	Number dying between ages x and $x + 1$	Person-years lived between ages x and $x + 1$	Total number of person-years lived above age x	Expectation of life at age x
	q_x	l_x	d_x	L_x	T_x	e_x
61-62	0.009652	87,763	847	87,339	1,968,648	22.4
62-63	0.010353	86,915	900	86,466	1,881,309	21.6
63-64	0.011081	86,016	953	85,539	1,794,843	20.9
64-65	0.011838	85,062	1,007	84,559	1,709,304	20.1
65-66	0.012634	84,055	1,062	83,524	1,624,745	19.3
66-67	0.013510	82,994	1,121	82,433	1,541,221	18.6
67-68	0.014504	81,872	1,187	81,278	1,458,788	17.8
68-69	0.015664	80,685	1,264	80,053	1,377,509	17.1
69-70	0.017059	79,421	1,355	78,744	1,297,456	16.3
70-71	0.018766	78,066	1,465	77,334	1,218,713	15.6
71-72	0.020689	76,601	1,585	75,809	1,141,379	14.9
72-73	0.022709	75,016	1,704	74,165	1,065,571	14.2
73-74	0.024795	73,313	1,818	72,404	991,406	13.5
74-75	0.027078	71,495	1,936	70,527	919,002	12.9
75-76	0.029614	69,559	2,060	68,529	848,475	12.2
76-77	0.032507	67,499	2,194	66,402	779,946	11.6
77-78	0.035786	65,305	2,337	64,136	713,544	10.9
78-79	0.039616	62,968	2,495	61,721	649,408	10.3
79-80	0.044017	60,473	2,662	59,142	587,687	9.7
80-81	0.048899	57,811	2,827	56,398	528,545	9.1
81-82	0.054283	54,985	2,985	53,492	472,147	8.6
82-83	0.060367	52,000	3,139	50,430	418,654	8.1
83-84	0.066954	48,861	3,271	47,225	368,224	7.5
84-85	0.074533	45,589	3,398	43,890	320,999	7.0
85-86	0.082695	42,192	3,489	40,447	277,108	6.6
86-87	0.092575	38,702	3,583	36,911	236,661	6.1
87-88	0.103427	35,120	3,632	33,303	199,750	5.7
88-89	0.115296	31,487	3,630	29,672	166,447	5.3
89-90	0.128216	27,857	3,572	26,071	136,775	4.9
90-91	0.142211	24,285	3,454	22,558	110,704	4.6
91-92	0.157287	20,832	3,277	19,193	88,145	4.2
92-93	0.173433	17,555	3,045	16,033	68,952	3.9
93-94	0.190616	14,510	2,766	13,127	52,919	3.6
94-95	0.208781	11,744	2,452	10,518	39,792	3.4
95-96	0.227849	9,292	2,117	8,234	29,273	3.2
96-97	0.247715	7,175	1,777	6,286	21,040	2.9
97-98	0.268255	5,398	1,448	4,674	14,753	2.7
98-99	0.289322	3,950	1,143	3,378	10,079	2.6
99-100	0.310753	2,807	872	2,371	6,701	2.4
100 and over	1.000000	1,935	1,935	4,330	4,330	2.2

SOURCE: NCHS, National Vital Statistics System, Mortality.

Table 2. Life table for males: United States, 2015Spreadsheet version available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/67_07/Table02.xlsx.

Age (years)	Probability of dying between ages x and $x + 1$	Number surviving to age x	Number dying between ages x and $x + 1$	Person-years lived between ages x and $x + 1$	Total number of person-years lived above age x	Expectation of life at age x
	q_x	l_x	d_x	L_x	T_x	e_x
0-1	0.006387	100,000	639	99,441	7,629,835	76.3
1-2	0.000452	99,361	45	99,339	7,530,394	75.8
2-3	0.000277	99,316	28	99,303	7,431,055	74.8
3-4	0.000224	99,289	22	99,278	7,331,753	73.8
4-5	0.000165	99,267	16	99,258	7,232,475	72.9
5-6	0.000164	99,250	16	99,242	7,133,217	71.9
6-7	0.000147	99,234	15	99,227	7,033,975	70.9
7-8	0.000132	99,219	13	99,213	6,934,748	69.9
8-9	0.000116	99,206	11	99,201	6,835,535	68.9
9-10	0.000100	99,195	10	99,190	6,736,335	67.9
10-11	0.000092	99,185	9	99,180	6,637,145	66.9
11-12	0.000100	99,176	10	99,171	6,537,965	65.9
12-13	0.000137	99,166	14	99,159	6,438,794	64.9
13-14	0.000208	99,152	21	99,142	6,339,635	63.9
14-15	0.000307	99,132	30	99,116	6,240,493	63.0
15-16	0.000411	99,101	41	99,081	6,141,377	62.0
16-17	0.000519	99,061	51	99,035	6,042,296	61.0
17-18	0.000646	99,009	64	98,977	5,943,261	60.0
18-19	0.000791	98,945	78	98,906	5,844,284	59.1
19-20	0.000941	98,867	93	98,820	5,745,378	58.1
20-21	0.001095	98,774	108	98,720	5,646,558	57.2
21-22	0.001233	98,666	122	98,605	5,547,838	56.2
22-23	0.001336	98,544	132	98,478	5,449,233	55.3
23-24	0.001396	98,412	137	98,344	5,350,755	54.4
24-25	0.001426	98,275	140	98,205	5,252,411	53.4
25-26	0.001445	98,135	142	98,064	5,154,207	52.5
26-27	0.001470	97,993	144	97,921	5,056,143	51.6
27-28	0.001497	97,849	147	97,776	4,958,222	50.7
28-29	0.001534	97,702	150	97,628	4,860,446	49.7
29-30	0.001577	97,553	154	97,476	4,762,819	48.8
30-31	0.001623	97,399	158	97,320	4,665,343	47.9
31-32	0.001667	97,241	162	97,160	4,568,023	47.0
32-33	0.001709	97,079	166	96,996	4,470,864	46.1
33-34	0.001750	96,913	170	96,828	4,373,868	45.1
34-35	0.001793	96,743	173	96,656	4,277,041	44.2
35-36	0.001845	96,569	178	96,480	4,180,384	43.3
36-37	0.001910	96,391	184	96,299	4,083,904	42.4
37-38	0.001979	96,207	190	96,112	3,987,605	41.4
38-39	0.002052	96,017	197	95,918	3,891,493	40.5
39-40	0.002134	95,820	205	95,718	3,795,574	39.6
40-41	0.002238	95,615	214	95,508	3,699,857	38.7
41-42	0.002367	95,401	226	95,288	3,604,348	37.8
42-43	0.002515	95,175	239	95,056	3,509,060	36.9
43-44	0.002684	94,936	255	94,809	3,414,004	36.0
44-45	0.002879	94,681	273	94,545	3,319,196	35.1
45-46	0.003089	94,409	292	94,263	3,224,651	34.2
46-47	0.003339	94,117	314	93,960	3,130,388	33.3
47-48	0.003662	93,803	344	93,631	3,036,428	32.4
48-49	0.004070	93,459	380	93,269	2,942,797	31.5
49-50	0.004537	93,079	422	92,868	2,849,528	30.6
50-51	0.005022	92,657	465	92,424	2,756,660	29.8
51-52	0.005510	92,191	508	91,937	2,664,236	28.9
52-53	0.006027	91,683	553	91,407	2,572,299	28.1
53-54	0.006583	91,131	600	90,831	2,480,892	27.2
54-55	0.007177	90,531	650	90,206	2,390,061	26.4
55-56	0.007801	89,881	701	89,530	2,299,855	25.6
56-57	0.008444	89,180	753	88,803	2,210,324	24.8
57-58	0.009116	88,427	806	88,024	2,121,521	24.0
58-59	0.009826	87,621	861	87,190	2,033,497	23.2
59-60	0.010584	86,760	918	86,301	1,946,307	22.4
60-61	0.011413	85,842	980	85,352	1,860,006	21.7

Table 2. Life table for males: United States, 2015—Con.

Spreadsheet version available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/67_07/Table02.xlsx.

Age (years)	Probability of dying between ages x and $x + 1$	Number surviving to age x	Number dying between ages x and $x + 1$	Person-years lived between ages x and $x + 1$	Total number of person-years lived above age x	Expectation of life at age x
	q_x	l_x	d_x	L_x	T_x	e_x
61-62	0.012301	84,862	1,044	84,340	1,774,655	20.9
62-63	0.013202	83,818	1,107	83,265	1,690,315	20.2
63-64	0.014075	82,711	1,164	82,129	1,607,050	19.4
64-65	0.014931	81,547	1,218	80,938	1,524,921	18.7
65-66	0.015806	80,330	1,270	79,695	1,443,983	18.0
66-67	0.016783	79,060	1,327	78,396	1,364,288	17.3
67-68	0.017892	77,733	1,391	77,038	1,285,891	16.5
68-69	0.019205	76,342	1,466	75,609	1,208,854	15.8
69-70	0.020817	74,876	1,559	74,097	1,133,245	15.1
70-71	0.022804	73,317	1,672	72,481	1,059,148	14.4
71-72	0.025029	71,646	1,793	70,749	986,666	13.8
72-73	0.027354	69,852	1,911	68,897	915,917	13.1
73-74	0.029799	67,942	2,025	66,929	847,020	12.5
74-75	0.032458	65,917	2,140	64,847	780,091	11.8
75-76	0.035395	63,777	2,257	62,649	715,244	11.2
76-77	0.038808	61,520	2,387	60,326	652,595	10.6
77-78	0.042532	59,133	2,515	57,875	592,269	10.0
78-79	0.046850	56,618	2,653	55,291	534,394	9.4
79-80	0.051917	53,965	2,802	52,564	479,102	8.9
80-81	0.057631	51,163	2,949	49,689	426,538	8.3
81-82	0.064030	48,215	3,087	46,671	376,849	7.8
82-83	0.070871	45,128	3,198	43,528	330,178	7.3
83-84	0.078217	41,929	3,280	40,290	286,650	6.8
84-85	0.086915	38,650	3,359	36,970	246,360	6.4
85-86	0.096237	35,290	3,396	33,592	209,390	5.9
86-87	0.107643	31,894	3,433	30,178	175,798	5.5
87-88	0.120117	28,461	3,419	26,752	145,620	5.1
88-89	0.133690	25,042	3,348	23,368	118,868	4.7
89-90	0.148381	21,694	3,219	20,085	95,500	4.4
90-91	0.164189	18,475	3,033	16,959	75,415	4.1
91-92	0.181092	15,442	2,796	14,044	58,456	3.8
92-93	0.199046	12,646	2,517	11,387	44,413	3.5
93-94	0.217982	10,128	2,208	9,025	33,026	3.3
94-95	0.237802	7,921	1,884	6,979	24,001	3.0
95-96	0.258387	6,037	1,560	5,257	17,022	2.8
96-97	0.279592	4,477	1,252	3,851	11,765	2.6
97-98	0.301253	3,225	972	2,740	7,914	2.5
98-99	0.323192	2,254	728	1,890	5,174	2.3
99-100	0.345218	1,525	527	1,262	3,285	2.2
100 and over	1.000000	999	999	2,023	2,023	2.0

SOURCE: NCHS, National Vital Statistics System, Mortality.

Table 3. Life table for females: United States, 2015Spreadsheet version available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/67_07/Table03.xlsx.

Age (years)	Probability of dying between ages x and $x + 1$	Number surviving to age x	Number dying between ages x and $x + 1$	Person-years lived between ages x and $x + 1$	Total number of person-years lived above age x	Expectation of life at age x
	q_x	l_x	d_x	L_x	T_x	e_x
0-1	0.005377	100,000	538	99,527	8,111,178	81.1
1-2	0.000352	99,462	35	99,445	8,011,651	80.5
2-3	0.000227	99,427	23	99,416	7,912,206	79.6
3-4	0.000160	99,405	16	99,397	7,812,790	78.6
4-5	0.000125	99,389	12	99,383	7,713,393	77.6
5-6	0.000122	99,376	12	99,370	7,614,011	76.6
6-7	0.000109	99,364	11	99,359	7,514,640	75.6
7-8	0.000099	99,354	10	99,349	7,415,281	74.6
8-9	0.000093	99,344	9	99,339	7,315,933	73.6
9-10	0.000089	99,334	9	99,330	7,216,594	72.6
10-11	0.000089	99,326	9	99,321	7,117,264	71.7
11-12	0.000096	99,317	10	99,312	7,017,942	70.7
12-13	0.000112	99,307	11	99,302	6,918,631	69.7
13-14	0.000139	99,296	14	99,289	6,819,329	68.7
14-15	0.000173	99,282	17	99,274	6,720,040	67.7
15-16	0.000212	99,265	21	99,255	6,620,766	66.7
16-17	0.000252	99,244	25	99,232	6,521,512	65.7
17-18	0.000292	99,219	29	99,205	6,422,280	64.7
18-19	0.000330	99,190	33	99,174	6,323,075	63.7
19-20	0.000365	99,157	36	99,139	6,223,902	62.8
20-21	0.000401	99,121	40	99,101	6,124,762	61.8
21-22	0.000437	99,081	43	99,060	6,025,661	60.8
22-23	0.000469	99,038	46	99,015	5,926,601	59.8
23-24	0.000496	98,992	49	98,967	5,827,586	58.9
24-25	0.000520	98,943	51	98,917	5,728,619	57.9
25-26	0.000543	98,891	54	98,864	5,629,702	56.9
26-27	0.000569	98,838	56	98,809	5,530,838	56.0
27-28	0.000601	98,781	59	98,752	5,432,028	55.0
28-29	0.000641	98,722	63	98,690	5,333,277	54.0
29-30	0.000688	98,659	68	98,625	5,234,587	53.1
30-31	0.000739	98,591	73	98,554	5,135,962	52.1
31-32	0.000792	98,518	78	98,479	5,037,408	51.1
32-33	0.000841	98,440	83	98,398	4,938,929	50.2
33-34	0.000884	98,357	87	98,314	4,840,531	49.2
34-35	0.000924	98,270	91	98,225	4,742,217	48.3
35-36	0.000970	98,179	95	98,132	4,643,992	47.3
36-37	0.001027	98,084	101	98,034	4,545,861	46.3
37-38	0.001092	97,983	107	97,930	4,447,827	45.4
38-39	0.001166	97,876	114	97,819	4,349,897	44.4
39-40	0.001250	97,762	122	97,701	4,252,078	43.5
40-41	0.001347	97,640	132	97,574	4,154,377	42.5
41-42	0.001458	97,508	142	97,437	4,056,803	41.6
42-43	0.001578	97,366	154	97,290	3,959,365	40.7
43-44	0.001707	97,213	166	97,130	3,862,076	39.7
44-45	0.001849	97,047	179	96,957	3,764,946	38.8
45-46	0.002000	96,867	194	96,771	3,667,989	37.9
46-47	0.002173	96,674	210	96,569	3,571,218	36.9
47-48	0.002384	96,464	230	96,349	3,474,650	36.0
48-49	0.002636	96,234	254	96,107	3,378,301	35.1
49-50	0.002915	95,980	280	95,840	3,282,194	34.2
50-51	0.003199	95,700	306	95,547	3,186,354	33.3
51-52	0.003484	95,394	332	95,228	3,090,807	32.4
52-53	0.003783	95,062	360	94,882	2,995,579	31.5
53-54	0.004103	94,702	389	94,508	2,900,697	30.6
54-55	0.004443	94,314	419	94,104	2,806,190	29.8
55-56	0.004808	93,895	451	93,669	2,712,086	28.9
56-57	0.005185	93,443	485	93,201	2,618,417	28.0
57-58	0.005562	92,958	517	92,700	2,525,216	27.2
58-59	0.005936	92,441	549	92,167	2,432,516	26.3
59-60	0.006323	91,893	581	91,602	2,340,349	25.5
60-61	0.006739	91,312	615	91,004	2,248,747	24.6

Table 3. Life table for females: United States, 2015—Con.

Spreadsheet version available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/67_07/Table03.xlsx.

Age (years)	Probability of dying between ages x and $x + 1$ q_x	Number surviving to age x l_x	Number dying between ages x and $x + 1$ d_x	Person-years lived between ages x and $x + 1$ L_x	Total number of person-years lived above age x T_x	Expectation of life at age x e_x
61-62	0.007208	90,696	654	90,369	2,157,743	23.8
62-63	0.007742	90,043	697	89,694	2,067,373	23.0
63-64	0.008349	89,345	746	88,972	1,977,679	22.1
64-65	0.009024	88,599	800	88,200	1,888,707	21.3
65-66	0.009754	87,800	856	87,372	1,800,507	20.5
66-67	0.010550	86,944	917	86,485	1,713,136	19.7
67-68	0.011452	86,026	985	85,534	1,626,651	18.9
68-69	0.012489	85,041	1,062	84,510	1,541,117	18.1
69-70	0.013714	83,979	1,152	83,403	1,456,607	17.3
70-71	0.015204	82,827	1,259	82,198	1,373,204	16.6
71-72	0.016900	81,568	1,378	80,879	1,291,006	15.8
72-73	0.018696	80,190	1,499	79,440	1,210,127	15.1
73-74	0.020515	78,690	1,614	77,883	1,130,687	14.4
74-75	0.022528	77,076	1,736	76,208	1,052,804	13.7
75-76	0.024780	75,340	1,867	74,406	976,596	13.0
76-77	0.027308	73,473	2,006	72,470	902,190	12.3
77-78	0.030300	71,466	2,165	70,384	829,721	11.6
78-79	0.033840	69,301	2,345	68,128	759,337	11.0
79-80	0.037844	66,956	2,534	65,689	691,209	10.3
80-81	0.042223	64,422	2,720	63,062	625,520	9.7
81-82	0.047002	61,702	2,900	60,252	562,458	9.1
82-83	0.052739	58,802	3,101	57,251	502,206	8.5
83-84	0.059026	55,701	3,288	54,057	444,955	8.0
84-85	0.066100	52,413	3,464	50,681	390,898	7.5
85-86	0.073764	48,948	3,611	47,143	340,218	7.0
86-87	0.083117	45,338	3,768	43,454	293,075	6.5
87-88	0.093469	41,569	3,885	39,627	249,622	6.0
88-89	0.104878	37,684	3,952	35,708	209,995	5.6
89-90	0.117395	33,732	3,960	31,752	174,287	5.2
90-91	0.131057	29,772	3,902	27,821	142,535	4.8
91-92	0.145887	25,870	3,774	23,983	114,714	4.4
92-93	0.161887	22,096	3,577	20,307	90,731	4.1
93-94	0.179040	18,519	3,316	16,861	70,424	3.8
94-95	0.197299	15,203	3,000	13,703	53,563	3.5
95-96	0.216593	12,204	2,643	10,882	39,860	3.3
96-97	0.236822	9,560	2,264	8,428	28,978	3.0
97-98	0.257858	7,296	1,881	6,356	20,549	2.8
98-99	0.279548	5,415	1,514	4,658	14,194	2.6
99-100	0.301715	3,901	1,177	3,313	9,535	2.4
100 and over	1.000000	2,724	2,724	6,223	6,223	2.3

SOURCE: NCHS, National Vital Statistics System, Mortality.