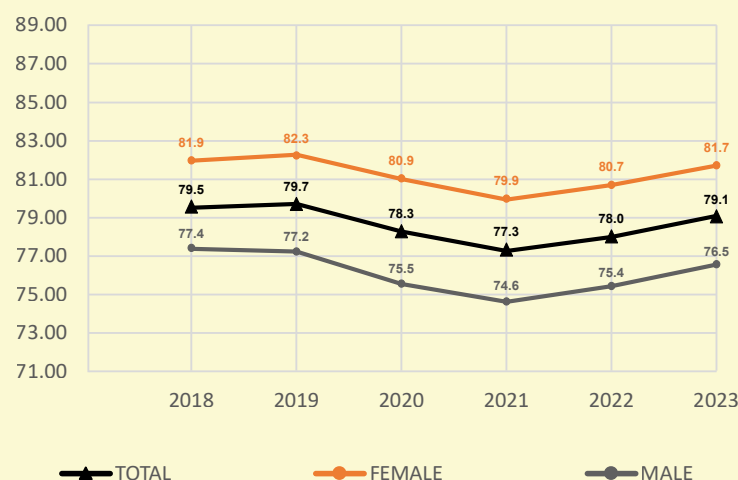


Life Expectancy in Virginia, 2023

Life expectancy is a key population-level health status indicator. Life expectancy at birth summarizes the mortality pattern that prevails across all age groups - children and adolescents, adults and the elderly.

The COVID-19 pandemic caused the largest decline in life expectancy in Virginia and the U.S. over the last 100 years. This report provides life expectancy estimates for Virginia for 2023, highlighting the gradual improvement of life expectancy in Virginia with life expectancy almost at pre-COVID-19 pandemic levels.



Methods

Life expectancy at birth is the average number of years a group of infants would live if they experienced, throughout their lives, the age-specific death rates for a given calendar year.

The Virginia Department of Health (VDH) collects Virginia's official vital statistics, analyzes the data, and makes this information available to the public. Life expectancy in 2019, 2021, 2022 and 2023 was calculated using the National Center for Health Statistics' (NCHS) abridged period life table method¹ based on death counts and birth

counts from Virginia. Population estimates were derived from the annual single race postcensal estimates produced by the U.S. Census Bureau. Life expectancy for American Indians and Alaska Natives was not calculated because of relatively small population numbers for that group in Virginia.

Death rates per 100,000 population for the 14 leading causes of death and COVID-19 in 2019, 2021, 2022, and 2023 in Virginia were age-adjusted using the 2000 U.S. standard population.

Results

In 2023, life expectancy at birth for the total Virginia population was 79.1 years, which was an increase of 1.1 years from 78.0 years in 2022. The 2023 life expectancy was 0.6 years lower than the 2019 pre-pandemic life expectancy of 79.7 years.

Life expectancy at birth for Virginia males was 76.5 years in 2023, an increase of 1.1 years from 75.4 in 2022 but still 0.7 years lower than the 2019 pre-pandemic life expectancy of 77.2 years. For Virginia females, life expectancy was 81.7 years in 2023, an increase of 1.0 years from 80.7 in 2022, but still 0.6 years lower than the 2019 pre-pandemic life expectancy of 82.3 years. The female life expectancy advantage compared to the male population in Virginia in 2023 was 5.2 years, which increased slightly from 5.1 years in 2019.

Among the White, non-Hispanic population in Virginia, life expectancy in 2023 was 79.2 years,

an increase of 1.0 years from 78.2 in 2022 but still 0.5 years lower than the 2019 pre-pandemic life expectancy of 79.7 years. Among the Black, non-Hispanic population life expectancy in 2023 was 74.9 years, an increase of 1.3 years from 73.6 in 2022 but still 1.1 years lower than the 2019 pre-pandemic life expectancy of 76.0 years. The White, non-Hispanic life expectancy advantage compared to the Black, non-Hispanic population in Virginia has increased from 3.7 years in 2019 to 4.3 years in 2023. Among the Hispanic population in Virginia, life expectancy in 2023 was 85.2 years, an increase of 0.3 years from the 2022 life expectancy of 84.9 years, but still 2.0 years lower than the 2019 life expectancy of 87.2 years. Among the Asian and Pacific Islander, non-Hispanic population in Virginia, life expectancy was 87.2 years, an increase of 0.6 years from the 2022 life expectancy of 86.6 years, but still 0.6 years lower than the 2019 life expectancy of 87.8 years.

Effect of changes in cause-specific mortality on life expectancy

Increases or decreases in life expectancy represent the combination of positive and negative contributions of cause-specific death rates. In 2023, the increase in life expectancy resulted from net decreases in cause-specific mortality rates.

Largest Age-adjusted Rate Decreases, Cause-specific Mortality in 2023 Compared to 2022, Virginia (Deaths per 100,000)

Cause	2022 Death Rate	2023 Death Rate	Decrease
COVID-19	45.6	11.8	33.8
Heart Disease	164.1	150.0	14.1
Unintentional Injury	58.0	48.3	9.7
Cancer	146.8	138.4	8.4
Diabetes Mellitus	27.4	23.2	4.2

Death rates for all other 14 leading causes of death also decreased in 2023, including death rates for Alzheimer's disease, stroke, chronic lower respiratory diseases, hypertension, pneumonia and influenza, chronic liver disease and cirrhosis, kidney disease, Parkinson's disease, septicemia and suicide.

In 2023, several cause specific death rates were lower than they were in 2019 before the COVID-19 pandemic. These were the death rates for cancer, chronic lower respiratory diseases, Alzheimer's disease, kidney disease, septicemia, and influenza and pneumonia. Death rates for COVID-19, heart disease, unintentional injury, stroke, diabetes, hypertension, Parkinson's disease and chronic liver disease and cirrhosis all were higher in 2023 than they were in 2019. The death rate for suicide in 2023 was the same as it was in 2019.

Discussion and Conclusion

The COVID-19 pandemic led to the largest decrease in life expectancy in Virginia since the 1918 influenza pandemic. Most deaths that led to this large decrease in life expectancy were caused by COVID-19, but smaller cause-specific death rate increases also contributed. To what degree these smaller cause-specific death rate increases were also due to the pandemic remains unclear, although by 2023 some of these cause-specific death rate increases have disappeared with some of these rates now lower than 2019 pre-pandemic rates.

The COVID-19 pandemic also exacerbated long standing health disparities. For example, the female life expectancy advantage was 5.2 years in 2023

which increased from 5.1 years in 2019. The White, non-Hispanic life expectancy advantage compared to Black, non-Hispanic life expectancy in Virginia increased to 4.3 years in 2023 compared to 3.7 years in 2019.

The impact of the COVID-19 pandemic on life expectancy and death rates in Virginia is still being seen in the 2023 vital records data but it is waning as life expectancy gradually improves. The total mortality rate for 2023 (714.1/100,000) was still higher than it was in 2019 (705.6/100,000), while 2023 life expectancy, although improved from 2022, was still lower than that of 2019.

Reference

1. Arias E, Xu JQ. United States life tables, 2018. National Vital Statistics Reports; vol 69,

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