

HOST: NCHS for the first time is releasing provisional, mid-year 2020 estimates on life expectancy in the United States. With the arrival of COVID-19 as one of the major causes of death in 2020, NCHS has been releasing mortality and other data related to the pandemic in record time. This new release of data documents that life expectancy at birth for the U.S. population dropped a full year in the first half of 2020 alone. This one-year drop in life expectancy, from 78.8 years in 2019 to 77.8 years in mid-year 2020, is the largest drop in life expectancy since 1943, during World War II.

Joining us today is the lead author of this new study, Elizabeth Arias, with NCHS's Division of Vital Statistics.

HOST: So this is the first time NCHS has released a mid-year estimate on life expectancy. How were you able to do this for the first time?

ELIZABETH ARIAS: We were able to produce provisional life expectancy estimates for the first half of 2020 because of steady improvements to the timeliness and quality of death records over the past few years. We will be updating the half year provisional life expectancy estimates with estimates based on deaths for the entire year with the goal of publishing them by May or June of 2021. And then we will also publish life expectancy estimates for 2020 based on final mortality data as part of the U.S. annual life tables.

HOST: Given the surge in COVID-19 deaths around the holidays, should we expect that the full-year life expectancy estimate for 2020 will be a much larger drop?

ELIZABETH ARIAS: Well if the number of excess deaths occurring in the months of July through December are greater than the number of excess deaths that occurred in the months January through June, then the full year life expectancy estimates may be lower. Excess deaths are typically defined as the difference between the observed number of deaths in specific time periods and expected number of deaths in the same time period.

HOST: How does this drop in life expectancy compare with the declines in life expectancy during the 1918 flu pandemic?

ELIZABETH ARIAS: The decline in life expectancy that we saw for 2020 is the highest decline that we have seen, not since the pandemic, but since the second world war when life expectancy declined 2.9 years between 1942 and 1943.

HOST: In general, men have shorter life expectancy than women. Does this mid-year 2020 analysis show reflect the same disparity?

ELIZABETH ARIAS: Yes it does. The disparity in life expectancy between men and women in fact increased in 2020 to 5.4 years from 5.1 years in 2019.

HOST: The new data shows bigger declines in life expectancy among minority populations. Could you discuss that?

ELIZABETH ARIAS: The COVID-19 pandemic has disproportionately affected minority populations, including African Americans, Hispanics, and Native Americans. The significantly larger declines in life expectancy in the African American population, which was 2.7 years, and in the Hispanic population, which was 1.9 years, reflect the racial and ethnic disparities in the effects of the pandemic. The decline

in life expectancy for the African American population was 3.4 times greater than the decline for the non-Hispanic white population. And the decline in life expectancy for the Hispanic population was 2.4 times greater than the decline for the non-Hispanic white population.

HOST: Past studies have shown that the Hispanic population has longer life expectancy than other groups. But it appears the pandemic has cut into that advantage significantly?

ELIZABETH ARIAS: Yes it has. For over 30 years, studies have consistently shown the Hispanic population has lower mortality than the non-Hispanic white population. Since we began estimating life expectancy by Hispanic origin with data year 2006, this Hispanic mortality advantage relative to the non-Hispanic white population increased from 2.1 year to 3.0 years between 2006 and 2019. As a result of the pandemic, the Hispanic life expectancy advantage declined 37% between 2019 and 2020 to an advantage of just 1.9 years.

HOST: Will you at some point have life expectancy estimates for Asians or other populations?

ELIZABETH ARIAS: Yes - we are currently working to expand the U.S. life table program to include life tables for the Asian and Native American populations. Problems with data quality has been the main reason we have not produced official U.S. life tables for these groups in the past. However, through a combination of improvement in data quality and the development of methods to address the data quality problems, we will be able to publish life tables for these populations very soon.

HOST: What about geographic differences in life expectancy during the pandemic? Any insight on that?

ELIZABETH ARIAS: Well, we did not produce life expectancy estimates by geography, including state or County estimates, so we cannot speak directly to geographic differences in life expectancy during the pandemic. We can speculate though that the national life expectancy estimates we produced for the first half of 2020 may underestimate life expectancy due to the over-representation of mortality in urban areas, where the pandemic was more prevalent during the first half of 2020 and where groups who experienced the worst effects are concentrated, such as the Hispanic and African American populations.

HOST: We've also seen very substantial increases in drug overdose deaths in the first part of 2020. Could that also be driving this decline in life expectancy?

ELIZABETH ARIAS: The life expectancy estimates for the first half of 2020 were estimated based on the total number of deaths that occurred during that period. The difference in life expectancy between the first half of 2020 and 2019 is due to the increase in the number of excess deaths during the former period. So excess deaths during that period may include deaths from causes other than COVID-19, such as drug overdose deaths.

HOST: Thanks to Elizabeth Arias for joining us to discuss her new study on the drop in life expectancy during the 2020 pandemic.

Today, NCHS is also releasing an updated trend report on suicide in the U.S., covering two decades from 1999 to 2019. The report shows that the suicide rate in the U.S. declined in 2019 for the first time since 2005. Holly Hedegaard, the author of the study, will be joining us on next week's edition of "Statcast" to discuss.