

STATE OF AGING IN CENTRAL INDIANA



SECTION 9 HEALTH OUTCOMES

April 2021



In this report, we refer to three subsets of older adults.

Younger-old: age 55-64

Middle-old: age 65-84

Oldest-old: age 85+

HEALTH OUTCOMES

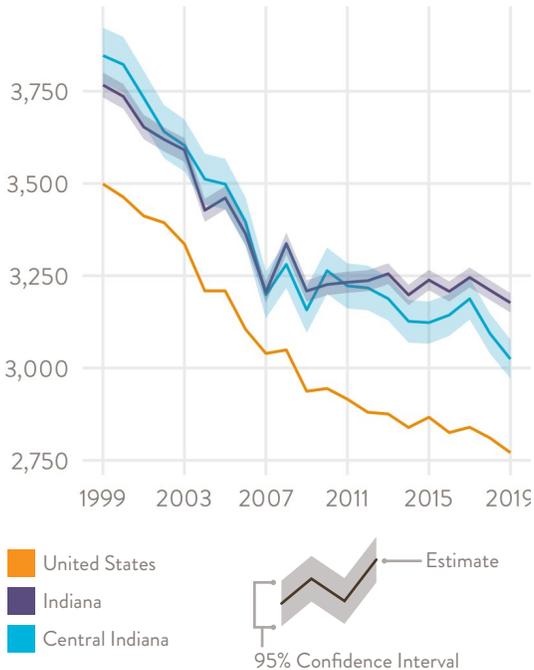
Many older adults deal with chronic diseases, like cancer and cardiovascular-related issues, increased disability, and increased susceptibility to lower-respiratory problems. These conditions can be exaggerated by social stressors and lifestyle factors. This section of the report discusses mortality rates, rates of disease, notable changes and disparities in the health of Central Indiana older populations. Key findings include:

- Age-adjusted mortality rates for older adults have decreased significantly since 1999, but for Indiana and Central Indiana remain much higher than national rates. Mortality rates are significantly higher for Blacks in Central Indiana compared to Whites.
- Cancer remains the leading cause of death for the younger- and middle-old. Heart disease is the leading cause of death for the oldest-old.
- Alzheimer's disease has become the third leading cause of death of those age 85 and older.
- Ambulatory disability is the leading type of disability for older adults in Central Indiana.
- Deaths from falls, drug overdose, and suicide have increased in older adults in Central Indiana over time, matching state and national trends. Older men are disproportionately affected by deaths from falls and suicide compared to women. Older Blacks are disproportionately affected by deaths from drug overdose compared to Whites.

MORTALITY

Mortality in Central Indiana has fallen since 1999 but leveled off in the mid-2000s.

Age-adjusted mortality rates, age 55+ per 100,000



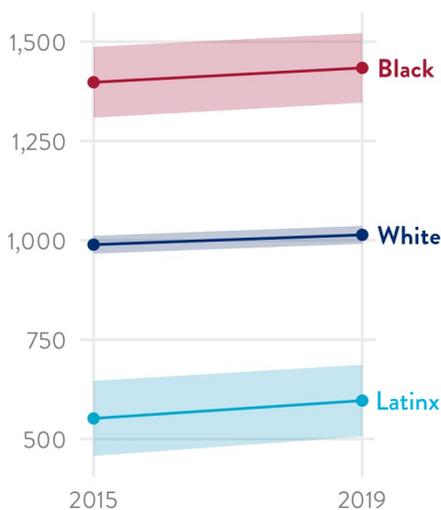
Since 1999, mortality rates for those age 55 and older have substantially decreased in the United States, as well as in Indiana and Central Indiana. However, mortality rates for older adults are still significantly higher in both Indiana and Central Indiana than they are nationally. Further, while national mortality rates have continued a downward trend, Indiana and Central Indiana mortality rates for this age group levelled off in the mid-2000s.¹

Similar downward trends are seen across the younger-old (age 55-64), middle-old (age 65-84) and oldest-old (age 85 and older) age groups. Blacks in Central Indiana have the highest mortality rates in each age group, with the exception of the oldest-old (age 85 and older), where Whites have the highest mortality rates. Latinx older adults have the lowest mortality rates across all age groups.² The racial/ethnic disparities seen in Central Indiana mirror those in the state and nation.³

How to read this chart. These statistics are only estimates. The estimate itself is shown as a dark line. The shaded area around that line represents the confidence interval. We are 95% sure the true value lies in that shaded area.

In Indiana, mortality is rising slightly for all people age 55-64 of all races.

Indiana mortality rate for age 55-64 by race

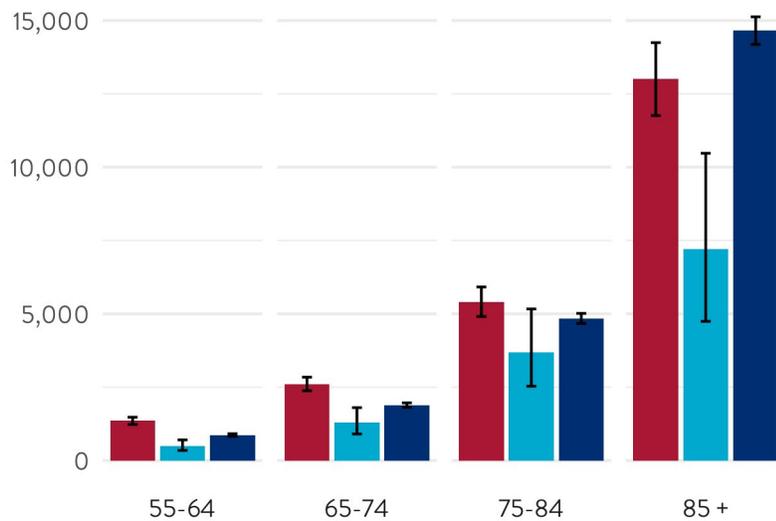


Source: CDC Wonder

CAUSES OF DEATH

Nationally, the top six causes of death in the age 55 and older population are cancer, diseases of the heart, chronic lower respiratory diseases, cerebrovascular diseases, Alzheimer's disease and accidents.⁴ Although these are consistently the top causes of death for older adults, the order of prominence changes across age groups. For example, cancer is the primary cause of death for the younger-old, whereas diseases of the heart are the primary cause of death in the oldest-old.⁵ Similarly, while Alzheimer's disease is the sixth leading cause of death for the younger-old, it is the third leading cause of death for the oldest-old.

Rates of death from accidents have been steadily increasing for the younger-old in the last decade, such that for both Indiana and the nation, they now constitute



Racial and ethnic disparities persist across most age groups.

Central Indiana mortality rates by age and race, 2017

Latinx
Black
White

Source: CDC Wonder

95% Confidence Interval
Estimate

the fourth and third leading causes of death, respectively. Accidental injury deaths and suicide rank seventh and fifteenth respectively.

In Central Indiana, the rates for the top causes of death are relatively consistent with national averages according to age-adjusted rates from the Centers of Disease Control and Prevention (CDC). However, cancer, the dominant cause of death for those under age 75, has higher rates of mortality in Central Indiana and Indiana compared to national rates. Similarly, deaths from chronic respiratory disease for those under age 75 are higher in Central Indiana and Indiana, compared to national rates.

The order of leading causes of death are similar between Blacks and Whites across all older adult age groups. In both cases, rates of death from cancer, the leading cause of death for those under age 75, have steadily declined since 1999, and in all cases, are overtaken by heart disease as the leading cause of death for those age 85 and older.

Because of the decline in chronic disease deaths, there has been an overall decline in the early death rate in Indiana over the past two decades.

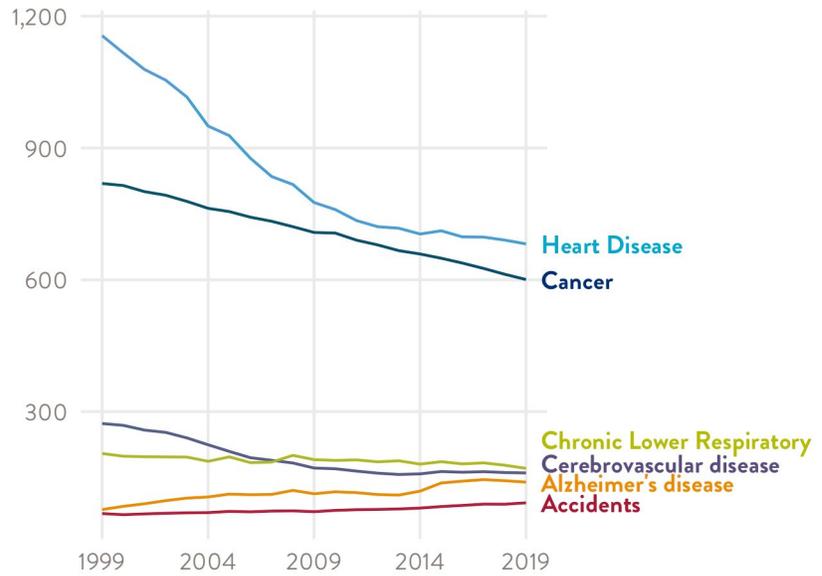
The order of leading causes of death are similar between Blacks and Whites across all older adult age groups and the decline in the early death rate occurred across both the Black and White older adult populations.⁶ There is not sufficient data about other races to make similar statements.⁷

Declining mortality rates for cancer and heart disease have driven the early death rate down.

Mortality rates per 100,000 by cause of death



Source: CDC Wonder



DISABILITY

According to the CDC, disability is defined as any condition of the body and mind (impairment) that make it more difficult for a person to do certain activities and interact with the world around them.⁸ The types of disabilities include vision, movement, thinking, remembering, learning, communicating, hearing, mental health and social relationships.⁹ The prevalence of disabilities in the older adult population provides a measure of the impact of chronic conditions on quality of life, including whether living a longer life necessarily translates into living an active and independent life.¹⁰

In Indiana in 2018, the prevalence of disability for those age 65 to 74 and those age 75 and older was 26% and 48%, respectively.¹¹ Ambulatory disability is the most common type of disability in the older adult population in Central Indiana, followed by hearing disability. No rate of disability appears to have significantly changed between 2013-2018.

Disability can be conceived as a gap between individuals' capacities (physical, cognitive and sensory ability) and their performance in daily activities and participation in social life. These physical and social barriers result in loss or limitation of opportunities to participate in normal life of the community on an equal level.¹² This functional disability

in older adults is routinely measured through their ability to perform activities of daily living (ADL).^{13, 14}

According to the Community Assessment Survey for older adults, nearly half of older adults in Central Indiana report that maintaining their homes (45%) or yards (49%) is at least a minor problem.¹⁵ Activities of daily living are a challenge for some. Nearly two-thirds (61%) report that doing heavy or intense housework is at least a minor problem, although at 38%, fewer report that performing regular activities, such as walking, eating and preparing meals is at least a minor problem for them.

NOTABLE HEALTH CHANGES IN CENTRAL INDIANA

The health needs of older adults are much different than those of younger age groups. Common chronic conditions affecting older adults are often accompanied by functional disability, making it more difficult to participate in typical daily activities and interactions and potentially reducing their quality of life. Despite some improvement in self-management of symptoms, treatments and lifestyle choices, the rates of some chronic diseases still are trending in the wrong direction.

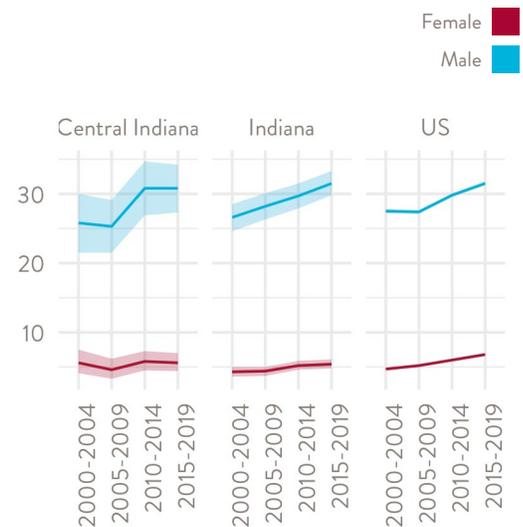
DEPRESSION

Clinical depression is a common and serious mood disorder. It causes severe symptoms that affect how one feels, thinks and handles daily activities, such as sleeping, eating or working. Statewide, rates of depression for Hoosiers age 55 and older remained relatively stable from 2011-2019, the rates for age 55-64 were consistently higher than that of age 65 and older. For 2019 these rates were 22% and 15% for age 55-64 and age 65 and older respectively.¹⁶ The rates are higher for women as compared to men (29% and 15% respectively 2019).¹⁷

These numbers likely underrepresent the magnitude of clinical depression among the older adult population due to underreporting. Proper diagnosis of depression in the elderly is of utmost importance. Undiagnosed or misdiagnosed depression can eventually culminate in other mental health and social problems, such as decreased cognitive and social functioning and increased suicide rates. Although women are more likely to be diagnosed

Suicide rates are rising, especially among men.

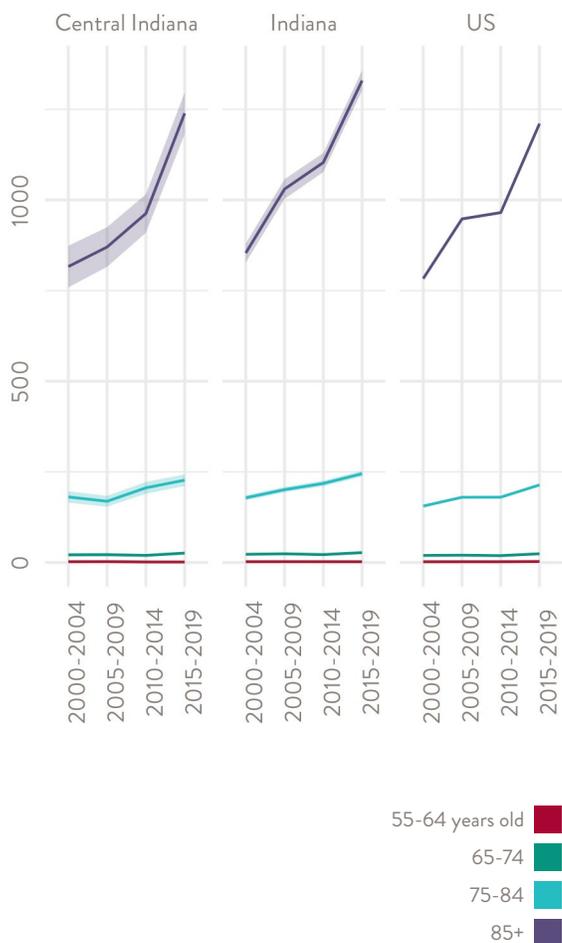
Suicide rates per 100,000, age 55+ by gender



Source: CDC Wonder

Alzheimer's death rates are increasing quickly among those 85 or older.

Alzheimer's deaths per 100,000



Source: CDC Wonder

with depression,¹⁸ men are more likely to commit suicide and are less likely to seek mental health help as compared to women¹⁹ and are less likely to be appropriately diagnosed.²⁰ Men over age 55 commit suicide at five to six times the rate of women. Nationally and in Indiana, since 1999, suicide rates have been increasing for both men and women, although the rate of increase for women is lower.²¹

In the presence of proper diagnosis of depression and depressive symptoms, many antidepressant medications are safe and well tolerated in older populations²² and considered first line of treatment.²³ Older individuals also benefit from receiving therapy from a mental health professional (psychiatrist, psychologist or a counselor) as an effective method of treating depression.²⁴ However, a growing body of evidence suggests widespread undertreatment of depressive disorders in the older population.²⁵ Treatment approaches that actively elicit and consider the preferences of the older adult may help to address this.²⁶ While screening, diagnosis, and treatment of depression is critical, the treatment in the older adult populations comes with its own risks. Polypharmacy, the prescription of multiple drugs to an individual, can lead to increased risk of adverse drug events, drug-interactions, medication non-adherence and reduced functional capacity.

ALZHEIMER'S DISEASE

"Alzheimer's disease is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills, and, eventually, the ability to carry out the simplest tasks."²⁷ It is the most common cause of dementia²⁸ among older adults, but it is not a normal part of aging.²⁹

The prevalence of Alzheimer's disease in the U.S. is increasing. An estimated 5.8 million Americans age 65 and older are living with Alzheimer's disease. By 2050, the number of Americans age 65 and older with Alzheimer's dementia is projected to reach 13.8 million, an almost 137% increase from 2020. While death due to other chronic conditions that impact the older adult population has either decreased or remained steady, death due to Alzheimer's disease has increased notably becoming the sixth leading cause of death in 2019.³⁰

DRUG OVERDOSE DEATHS

For those age 55 and older in the U.S., drug overdose deaths increased five-fold between 1999 and 2019.

Racial and ethnic disparities in drug overdose deaths persist.³¹ Since 2012, the rates of drug overdose deaths in Indiana have generally been higher for Blacks than for Whites. To learn more about factors that influence higher rates of opioid-related deaths among Black older adults, please read 'Highlighting Equity' below.

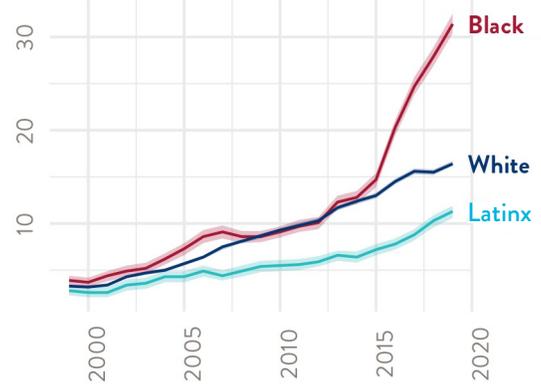
OPIOID USE DISORDER DEATHS

Opioid use disorder (OUD) is defined as a problematic pattern of opioid use that leads to serious impairment or distress. The use of prescription opioids is considerably higher in older age groups due to multiple chronic conditions leading to chronic pain. As such, this age group is at a higher risk of developing OUD due to availability of prescription opioids and increased vulnerability due to overall health conditions. While deaths due to prescription opioids contributed to 32% of all the opioid overdose deaths, this was a decrease of 14% from 2017 to 2018.

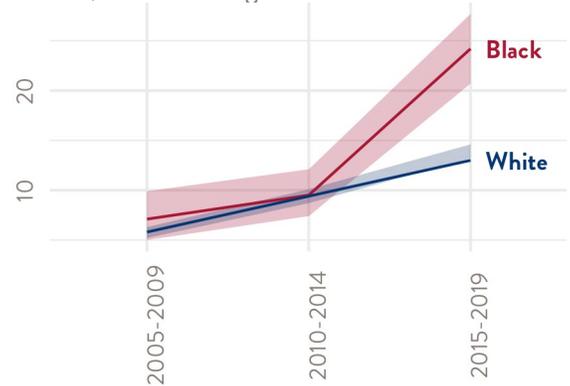
In Central Indiana, opioid overdose has resulted in increasing death rates in age 55 and older across all races from 2009 to 2018. However, the death rates are consistently higher for Blacks when compared with Whites. These racial disparities were also observed throughout the state.

Drug overdose deaths among older adults are increasing dramatically, especially among Black individuals.

Drug overdose deaths in **U.S.** per 100,000 adults age 55+



Drug overdose deaths in **Indiana** per 100,000 adults age 55+



Source: CDC Wonder



HIGHLIGHTING EQUITY

BLACK OPIOID DEATH RATES HIGHER THAN WHITES

Between 2015 and 2017, the opioid death rate for Black adults age 55 to 64 nearly doubled in large metro areas.³² Below are some factors that have influenced this increase in opioid use and death rates among this population:



INTERPERSONAL FACTORS: FEAR OF LEGAL CONSEQUENCES

The “War on Drugs” movement that began in the 1980s created severe penalties for nonviolent drug offenses, which resulted in disproportionate rates of incarceration for people of color in comparison to Whites. This, as well as other numerous historical events, have sown mistrust within Black communities toward the healthcare and criminal justice systems and created fear that seeking treatment for opioid use will result in arrest or incarceration.³³



COMMUNITY FACTORS: LESS ACCESS TO PRESCRIBED OPIOIDS

Studies have shown that Black older adults who experience chronic pain may be untreated or under-treated for their pain,³⁴ and are significantly less likely to be prescribed opioid medications for pain compared to White patients. This disparity may be attributed to underestimating Black patients’ self-reported pain, as well as stereotyping and discrimination by providers.³⁵ Although this lack of access to prescription opioids created somewhat of a protective effect for Black patients against prescription-opioid misuse, it also led to an increase in people of color accessing illegal versions of these drugs, which are often laced with synthetic opioids such as fentanyl.³⁶ An analysis of opioid deaths in large metro areas found that 70 percent of opioid-related deaths among middle-age Blacks were tied to synthetic opioids, compared to only 54 percent of White and 56 percent of Latinx opioid-related deaths. Between 2014 and 2017, synthetic opioid-related deaths rates increased by over 800 percent among Blacks, the sharpest increase among all races and ethnicities.³⁷



POLICY FACTORS: DISPARITIES IN ACCESS TO TREATMENT

Black individuals with opioid use disorder often have less access to the full range of medication-assisted treatment options available in comparison to Whites. While both buprenorphine and methadone are effective treatments, buprenorphine is often considered a less stigmatizing and disruptive option. Methadone treatments require daily visits to methadone clinics, mandatory counseling and regular and random drug testing. In contrast, buprenorphine is an office-based treatment that can be administered by a primary care physician. However, studies have shown that methadone clinics are most common in low-income areas with greater proportions of people of color, while buprenorphine treatment is most accessible in residential areas with more White, higher-income patients.³⁸ Buprenorphine treatments are most often paid for either out-of-pocket (40 percent) or by private insurance (34 percent), while Medicare and Medicaid only accounted for 19 percent of visits.³⁹ Although most Medicare Part D plans included buprenorphine treatments, as of 2018, 65 percent of these plans have some sort of restricted coverage for this medication.⁴⁰ This further creates disparities in access for Black older adults who rely on Medicare for health coverage. Even though both Blacks and Whites experience similar rates of opioid use disorder, White patients were 35 times more likely to receive a buprenorphine prescription than Black patients.⁴¹

FALLS

Falls are the leading cause for fatal and non-fatal injuries for older Americans.⁴² According to Community Assessment Survey for Older Adults (CASOA) survey results, in 2017, 28% of Central Indiana seniors reported falling or injuring themselves in their own homes, highlighting the need for fall prevention programs targeting interventions for risk factors. While deaths from falls for older adults have risen nationally, we cannot reliably say the same for Indiana based on the available data. See the Aging in Place chapter for further detail.

OBESITY

Obesity is a complex health condition with several causes and contributing factors. These include behavioral factors like eating habits, inactivity, medication use and other environmental exposures (social media, pollution, chemicals etc.) In Central Indiana, across all racial and ethnic groups, Blacks and Whites have the highest rates (25% and 21% respectively) among the CMS beneficiaries.

DIABETES

Diabetes is a chronic condition that requires careful management and continuous support to avoid complications such as heart disease, eye and vision problems, kidney disease and nerve damage. Although the burden of diabetes is often described in terms of its impact on working-age adults, diabetes in older adults is linked to higher mortality, reduced functional status and increased risk of institutionalization.⁴³ In Central Indiana, diabetes rates in older adults remained stable from 2013 to 2018 among CMS beneficiaries, though rates for people of color have been persistently higher.

SOCIOECONOMIC AND LIFESTYLE RISK FACTORS

It is important to note that socioeconomic and lifestyle factors both have a large influence on chronic disease and disability trends. Risk factors include smoking, obesity, diabetes, hypertension and mental health conditions (depression, Alzheimer's disease, anxiety). Socioeconomic factors, such as employment rate, available jobs, increasing earning inequities and rises in full retirement age, can each explain some of the fluctuation in reported disability and chronic disease incidence rates.

ENDNOTES

- 1 The data for mortality trends is obtained from CDC WONDER.
- 2 Rates for Latinx are considerably lower, under-reporting of ethnicity on the death certificate is a factor that should be considered while interpreting these data.
- 3 CDC Wonder data allows for separation of non-Latinx Black and non-Latinx Whites. The data for Latinx in this report includes Latinx Whites as data for Latinx Blacks for all categories was suppressed or unreliable.
- 4 The leading cause of deaths for ten-year age groups are obtained from CDC WONDER data using the ICD-10 cause list.
- 5 SoAR age groups
- 6 There are competing definitions of 'early death,' or 'premature mortality.' A 2018 study in *The Lancet* defines it as "deaths of individuals aged 25-64," while the United Health Foundation's Senior Report 2019, defines it as "mortality from all causes in seniors aged 65-74." Ana Best, et al. Premature mortality projections in the USA through 2030: a modelling study. 2018. *The Lancet Public Health* 3 (8): PE374-84. & United Health Foundation. America's Health Rankings. Senior Report 2019. <https://www.americashealthrankings.org/learn/reports/2019-senior-report>.
- 7 Rates of many causes of death for Latinx in Central Indiana were mostly unreliable, so are omitted from this report.
- 8 CDC, "Disability and Health Overview | CDC," Centers for Disease Control and Prevention, September 15, 2020, <https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html>.
- 9 CDC.
- 10 In 1980, Dr. James Fries, Professor of Medicine, Stanford University introduced the compression of morbidity theory. This theory states that "most illness was chronic and occurred in later life and postulated that the lifetime burden of illness could be reduced if the onset of chronic illness could be postponed and if this postponement could be greater than increases in life expectancy." Stanford School of Medicine. Compression of Morbidity Theory. <https://palliative.stanford.edu/overview-of-palliative-care/compression-of-morbidity-theory/>
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- 13 The activities of daily living (ADLs) is a term used to collectively describe fundamental skills that are required to independently care for oneself such as eating, bathing, and mobility
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- 21 Changes in suicide rates for Central Indiana are within the margin of error (CDC WONDER)
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- 31 "Overdose Death Maps | Drug Overdose | CDC Injury Center," November 20, 2020, <https://www.cdc.gov/drugoverdose/data/prescribing/overdose-death-maps.html>.
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- 36 Jasmine Drake et al., "Exploring the Impact of the Opioid Epidemic in Black and Latinx Communities in the United States," *Drug Science, Policy and Law* 6 (January 1, 2020): 2050324520940428, <https://doi.org/10.1177/2050324520940428>.
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- 38 "THE OPIOID CRISIS AND THE BLACK/AFRICAN AMERICAN POPULATION: AN URGENT ISSUE."
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