

An Introduction to Social Determinants of Health Across the Life Course and Workplace Well-Being



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Executive Summary

Social determinants of health (SDOH) are nonmedical factors that influence health outcomes. These determinants are connected to the conditions into which we were born, grow, live, and age, by circumstances during our lives, and by the decisions we make. The SDOH affect many aspects of life, and they can become dominant factors in a person's health and longevity.

In this report, the determinants identified by the World Health Organization are grouped into five buckets as used in the Healthy People 2030 framework:



Economic stability: income and social protection; unemployment and job insecurity; working life conditions.



Neighborhood and built environment: food insecurity; housing, basic amenities, and the environment.



Education access and quality: education; early childhood development.



Social and community context: social inclusion and nondiscrimination; structural conflict.



Health care access and quality: access to affordable health services of decent quality.

During one's lifetime, all these factors are important, yet the relative importance of these determinants changes based on the needs and activities of early childhood, adolescence and young adulthood, middle adulthood, and older adulthood. As demonstrated in this report, some determinants are important regardless of the time of life, while others are more dominant in some life phases than others.





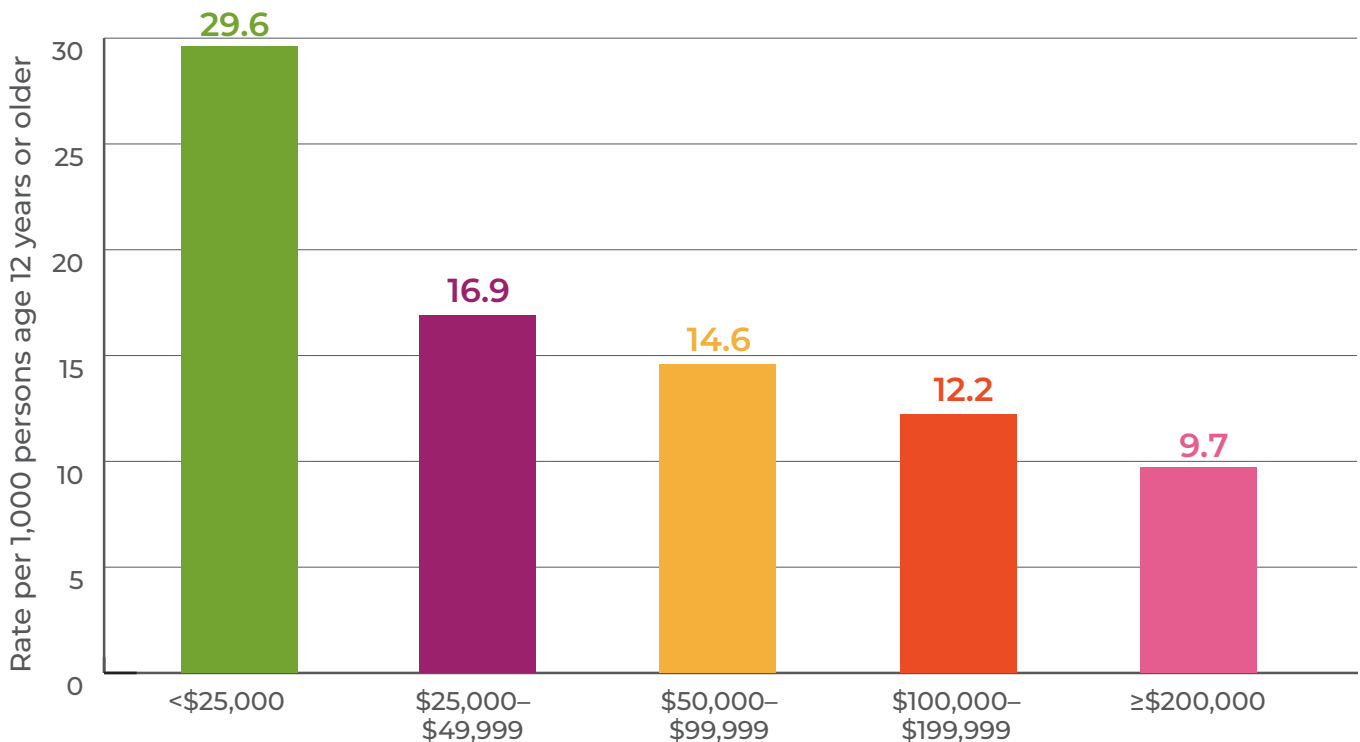
Across the Life Course: Clean Air and Water, Safety, Connections, and Health Care

What's important:

Throughout life, people need physical and emotional safety, supportive loved ones and community members, quality health care, and clean air and water. Structural conflict can refer to the widespread danger and disruption of a war zone, but it can also mean a neighborhood where residents do not feel safe to get outdoor exercise or allow children to venture outside. Communities across the United States have neighborhoods where safety and conflict are concerns.

What employers and communities can do:

Employers and communities provide much of the infrastructure and necessities for people to thrive. Neighborhoods can be designed so that necessary services are available, health can flourish, and the quality and quantity of life are increased. Something as simple as sidewalks and walking/biking paths can make a large difference in the health and socialization of a neighborhood.



Violent victimizations in the United States happen more often to people in households with lower annual incomes (Bureau of Justice Statistics, 2022).

Rates are per 1,000 persons age 12 years or older. Includes rape or sexual assault, robbery, aggravated assault, and simple assault. Excludes homicide because the survey is based on interviews with victims.

Source: Bureau of Justice Statistics, 2022.



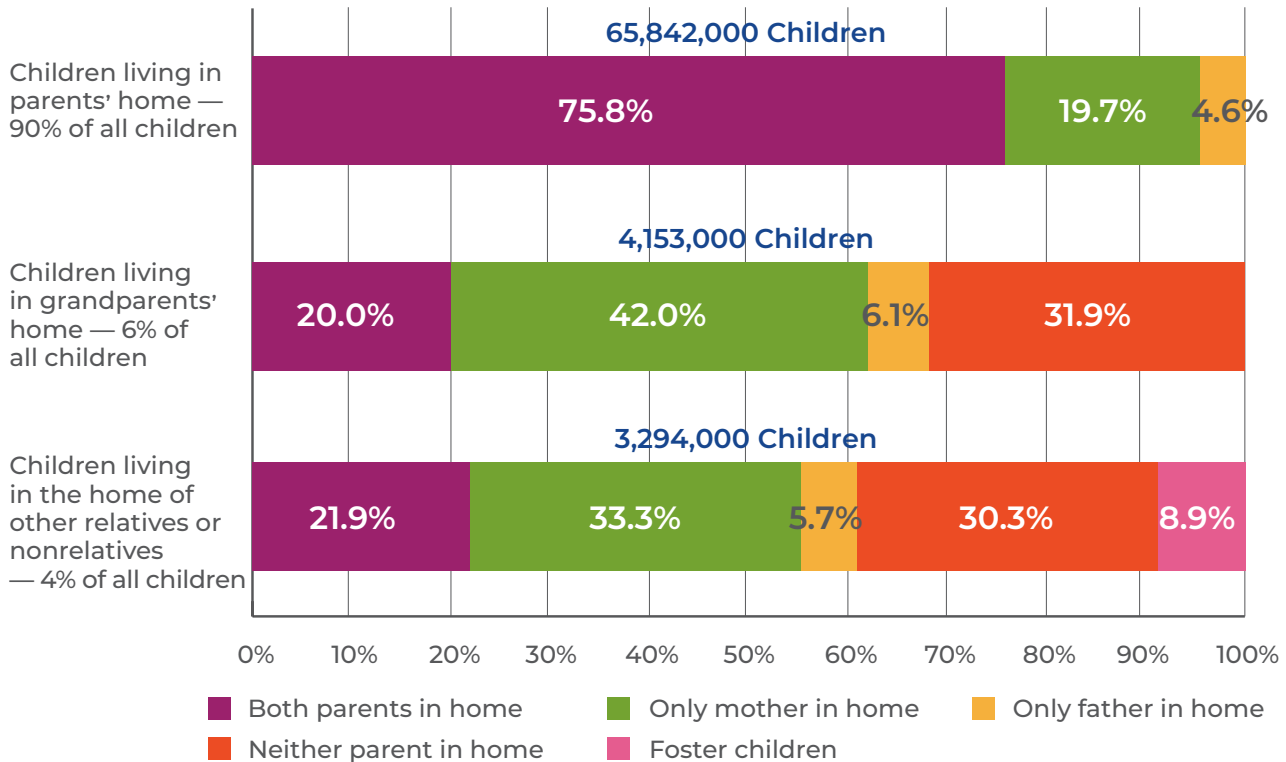
Early Childhood: The Start of a Life Well Lived

What's important:

Early childhood is a sensitive time of life. Interventions or traumatic experiences during this period will have lasting effects on a child's cognitive, physical, behavioral, and psychomotor skills. A stable home, access to quality early education, health care services that help children to grow and develop properly, and a supportive community without discrimination and microaggressions are important during early childhood.

What employers and communities can do:

Employees who are parents of young children have difficulty balancing work with the many tasks they do each day for their little ones. This time commitment affects their productivity, absenteeism, and presenteeism. Helping low-wage workers with children younger than 13 years of age to navigate childcare challenges is an important role for employers. Examples of helpful benefits are providing paid leave for periods of children's illnesses, emergency or backup childcare for low-wage earners, and loans to cover loss of income. Employer-paid tutoring benefits are useful for home-based workers and those wanting to provide educational after-school activities.



Nearly 73.3 million children were living in the United States in 2022. They resided in a wide variety of homes, many with both parents but a sizable minority with one parent, usually the mother. Grandparents were raising about 1.3 million children with neither parent in the home, another 1 million children lived with other relatives/nonrelatives, and 300,000 were in foster homes (U.S. Census Bureau, 2022a).

Source: U.S. Census Bureau (2022a).



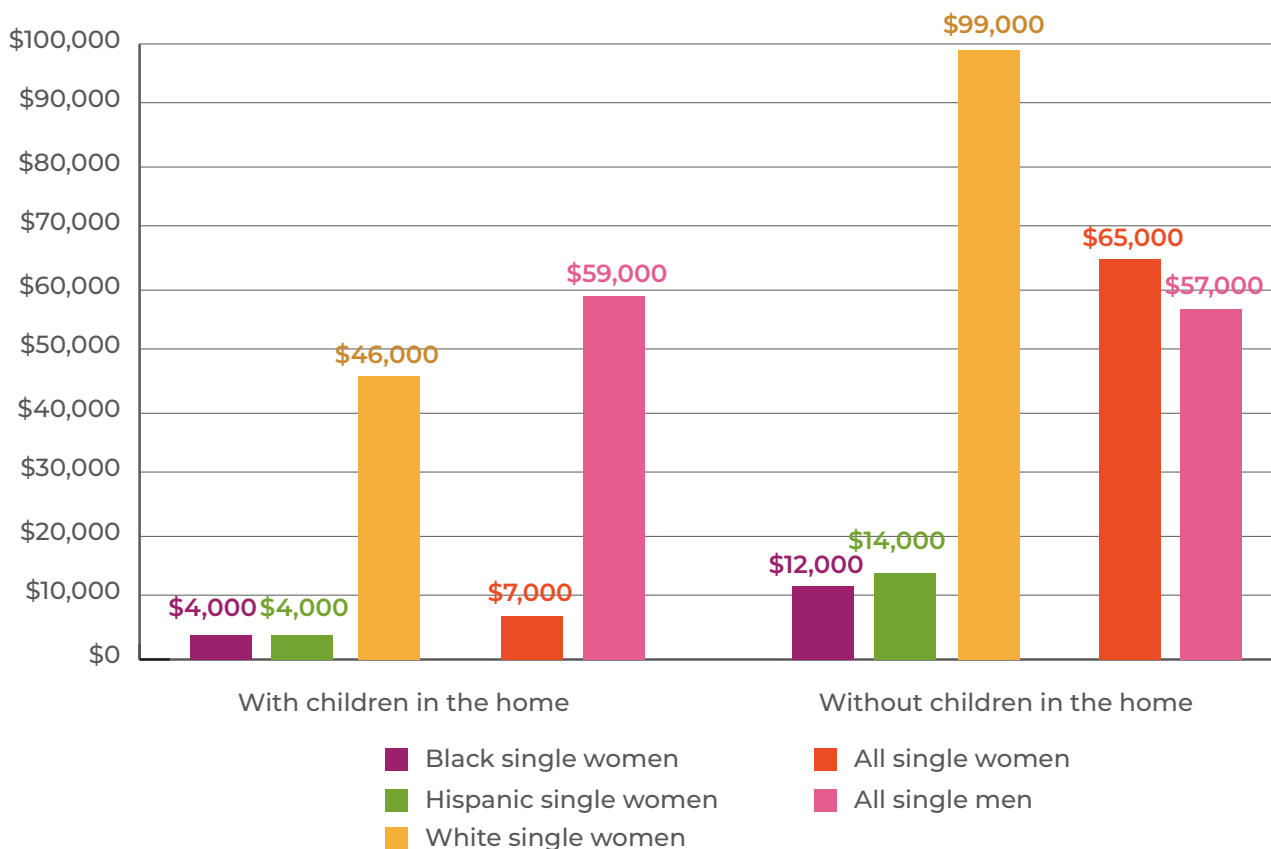
Adolescence and Young Adulthood: Times for Decisions and Growth

What's important:

Schools serve a funneling purpose by sending adolescents to 4-year colleges, trade schools, jobs requiring limited skills, or a life on the streets or in the legal systems. Ultimately though, people's individual decisions and preferences affect the trajectory their life will take. The choice of an educational path and career objective is linked to the type of work a person does (mental or physical, stressful or not). The income potential varies based on the chosen profession, and financial literacy affects how much of this income is retained as wealth. Children require time and emotional commitment—and a large slice of the family budget.

What employers and communities can do:

Students and workers need the support of community groups and understanding employers to navigate current trends: increasing educational costs, fewer marriages, more unmarried partners, more people living alone, fewer children overall, more births among women in their 40s, and more women working but (still) for less pay than men. Helping people navigate the gap between income and expenses, particularly when they have children and are in low-paying jobs, is a key role for employers.



Because of the demands on single parents and the high cost of childcare, children have a dramatic impact on wealth, particularly among minoritized and low-wage groups (Hernández Kent, 2021).

Source: Hernández Kent, 2021.



Middle Adulthood: Challenges and Opportunities

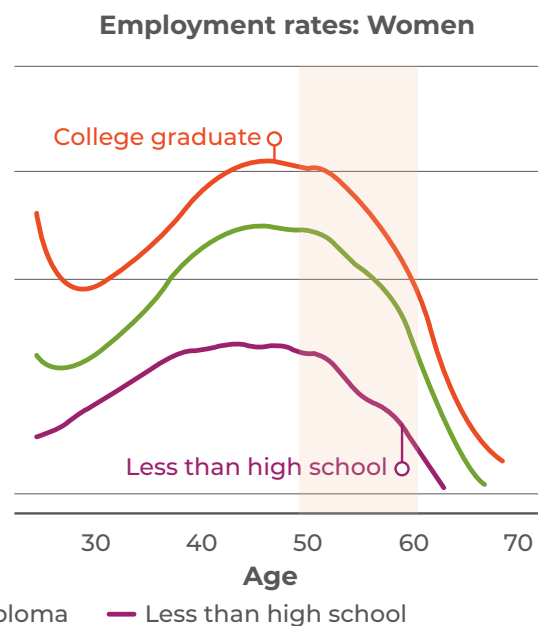
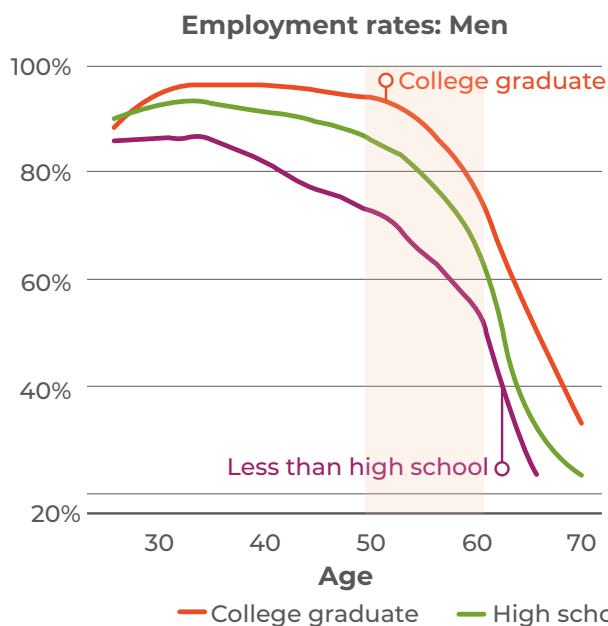
What's important:

Americans in middle adulthood face challenging health and financial problems. The cumulative advantages or disadvantages begin to translate into more than differences in material possessions; life expectancy for individuals with high incomes at age 40 is 15 years greater for men and 10 years greater for women than those with the lowest incomes. Not only does income vary, participation in the workforce has varied in recent years. The more education a person has, the more likely that person is to be employed until choosing to retire. People with insufficient retirement funds may plan to work into older adulthood. However, the likelihood of working longer rises with employment stability in one's 50s. In other words, if you have a job, you have a

better chance of working later in life. Chronic health problems—obesity, diabetes, hypertension, substance abuse—in this stage of life was associated with reduced life expectancy among Americans even before the pandemic.

What employers and communities can do:

Programs to address chronic health problems are needed both in the workplace and community. Education about fentanyl and other illicit drugs is important; it should focus on reducing opioid overdose deaths, which were highest in 2021 among Americans aged 35 to 54 years.



The more education people have, the greater the likelihood of their having a job throughout their working years. Having a job translates into greater income, but it also means a person is more likely to have the opportunity to beef up (or not use) retirement monies by working into the traditional retirement years (Berkman & Truesdale, 2023).

Note: Shading indicates fall in employment between 50 and 60 years of age.

Source: Berkman & Truesdale, 2023.

Reprinted from *The Journal of the Economics of Ageing*, 24, Berkman, L. F., & Truesdale, B. C., Working longer and population aging in the U.S.: Why delayed retirement isn't a practical solution for many, Copyright (2023), with permission from Elsevier.



Older Adulthood: When Retirement Is Not Planned Ahead

What's important:

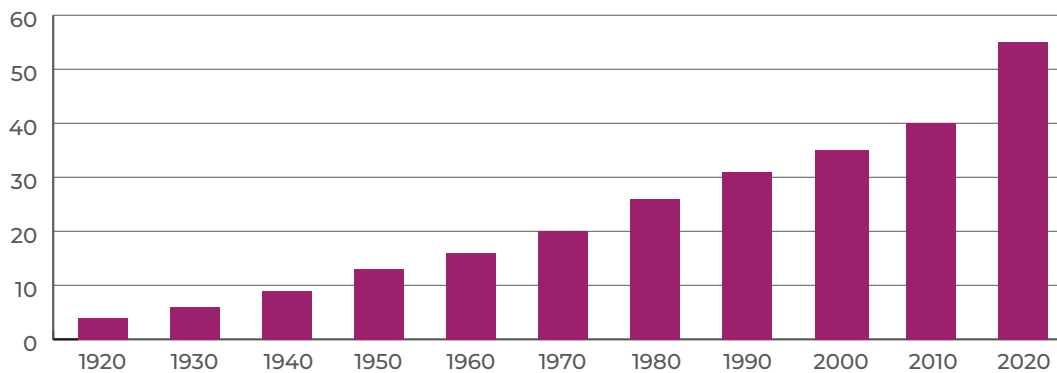
Trends are pointing toward an aging population with more physical infirmities that can affect their work capacity, lifestyle, and quality of life. These problems reduce older people's ability to join or stay in the workforce or to maintain their activities of daily living as they age. Three factors are key in older adulthood, all of which are affected by the cumulative advantages over a person's lifetime: wealth, health, and social connections. Wealth enables individuals to pursue their preferred lifestyle and increases their chances of living longer. Health makes them physically and mentally able to participate in their chosen activities. Social connections are needed for emotional health in general and with assistance with practical needs such as rides to medical appointments or daily tasks if geriatric syndromes such as cognitive impairment or frailty affect a person's abilities.

What employers and communities can do:

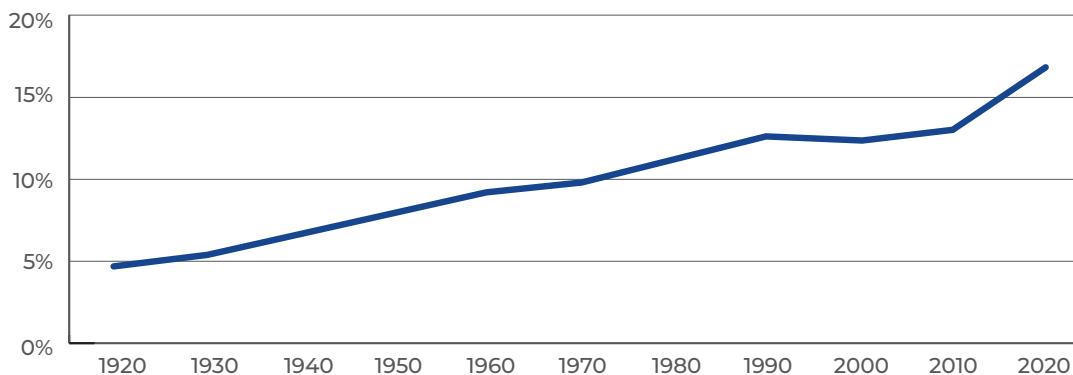
Retirement counselors and educational programs in the workplace can help older adults plan for the future and know what to expect in their own situation. The upper middle class is at greatest risk of not being able to maintain their preretirement lifestyle. Helping retirees maintain social connections is a key function served by community programs. Not only do people live longer when they have social ties with friends, neighbors, relatives, and former work colleagues, they often need help with tasks at home and transportation to food stores, pharmacies, and medical appointments.

For the 60 percent of Americans who own their homes, much of their wealth comes from that equity, which does not help with daily expenses without a sale or reverse mortgage. The other 40 percent of Americans have no equity—and many times insufficient savings for retirement.

Millions

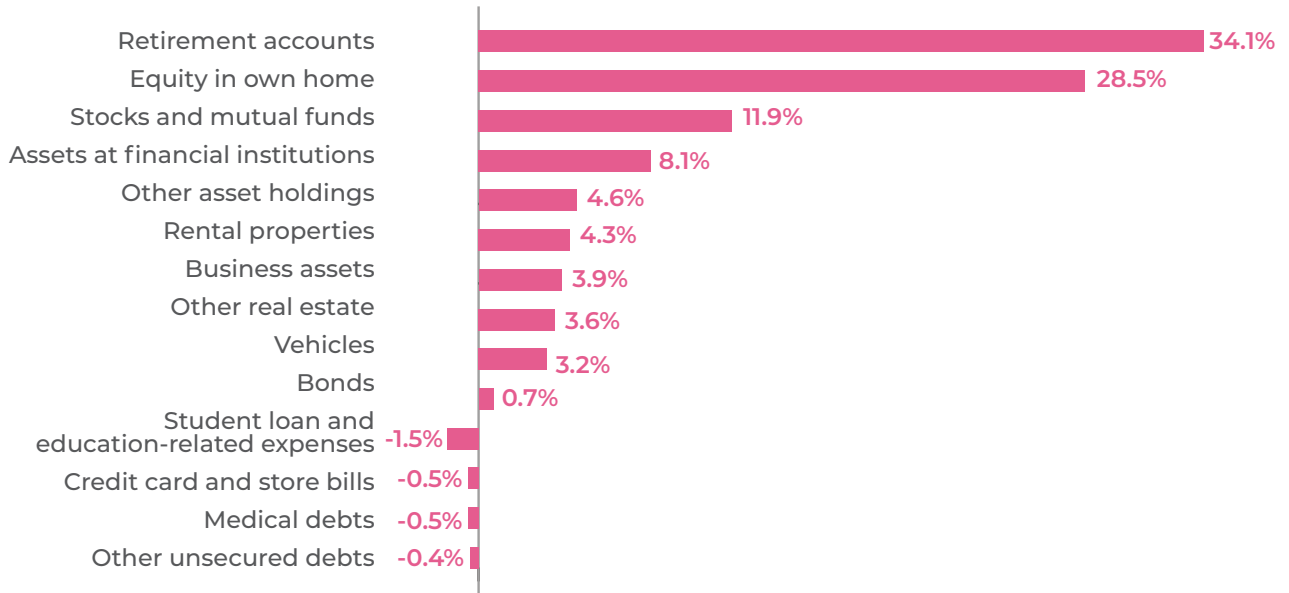


Percentage of total population



Older Americans (≥65 years of age) are increasing in number and as a percentage of the U.S. population (U.S. Census Bureau, 2023b).

Source: U.S. Census Bureau, 2023b.



Wealth in American households at or below the 99th percentile in 2021 was concentrated in retirement accounts and home equity (U.S. Census Bureau, 2023a).

Note: This figure excludes households in the top 1 percent of wealth because their holdings are not representative of other Americans.
 Source: U.S. Census Bureau, 2023a.

Conclusion

Social determinants of health can present challenges to people, affect someone’s life trajectory, and interact with each other to multiply advantages and disadvantages. Some determinants are important regardless of life phase, while others are more dominant in some phases than others. Employers can improve the quality of life of

employees, their families, and the community by focusing on the effects of economic stability, education access and quality, health care access and quality, neighborhood and the built environment, and social and community context across the life course.



Introduction

Warm, responsive relationships in the early years of life. Clean, safe drinking water. Access to affordable medical and dental care. Financial security in a stable home. A teacher or mentor who influences priorities or changes outlooks. Hearing about a scholarship that provides an important educational opportunity. Making decisions during adolescence and adulthood that open doors instead of closing them. Finding the right career or perfect job. Choosing a compatible, supportive life partner. Having financial literacy when entering adulthood.

From genetics to pure happenstance, many factors come together to set a person on a life trajectory and to bend it as life happens. As children have limitless dreams, parents are equally hopeful for a better life for their kids in a safe neighborhood and supportive community. These aspirations are often tempered or undermined by the conditions into which we were born, grow, live, and age, by circumstances during our lives, and by the decisions we make. These conditions affect many aspects of life, and they ultimately can become dominant factors in a person's health and years of life.

Recognized as social determinants of health (SDOH) by the World Health Organization (WHO), these nonmedical factors have been examined in research studies of their influence on health outcomes (Figure 1). Examples of SDOH as identified by the WHO are income and social protection;

education; unemployment and job insecurity; working life conditions; food insecurity; housing, basic amenities, and the environment; early childhood development; social inclusion and nondiscrimination; structural conflict; and access to affordable health services of decent quality (WHO, n.d.).

Not only do these determinants affect a person's life trajectory, they interact with each other to multiply an individual's advantages and disadvantages. This report examines the multiple dimensions of SDOH, their impact on the well-being of workers and their families, and how they interact across the life course to influence the health, wealth, and social trajectories of each individual in the times and places in which they live and work.

The SDOH are examined through the lens of the "work" people do in the form of educational activities during youth and in the workplace throughout their lives. Many factors are associated with a person's income and wealth, and this report looks at how pivotal factors such as training and education can bend a person's trajectory and how employers can support workers in achieving success in their careers and maintaining their health over the lifespan. Ways in which companies, employers, and businesses can influence the lives of people in their communities are also noted in sidebars throughout the report.

The WHO's SDOH are grouped by the U.S. Department of Health and Human Services in its Healthy People 2030 as follows (U.S. Department of Health and Human Services, n.d.):

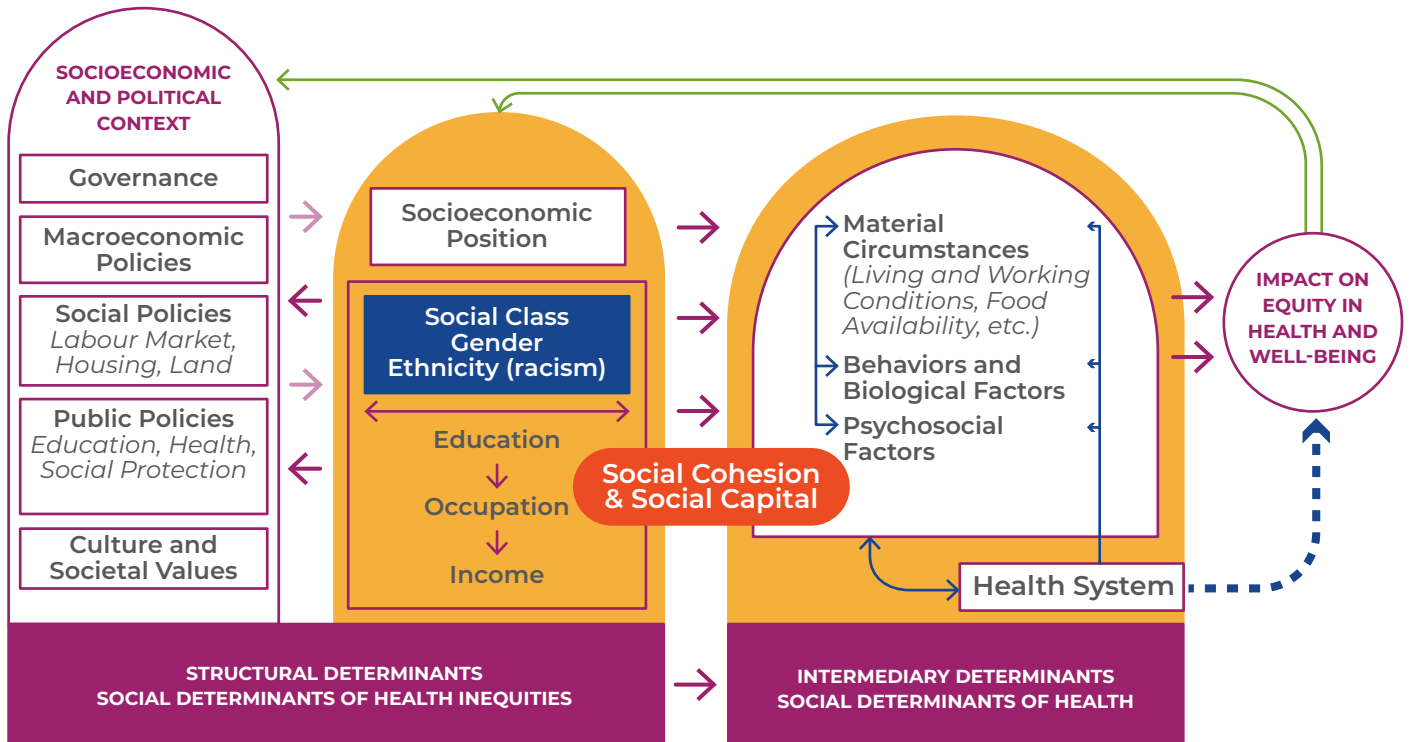
- **Economic stability:** income and social protection; unemployment and job insecurity; working life conditions.
- **Education access and quality:** education; early childhood development.
- **Health care access and quality:** access to affordable health services of decent quality.
- **Neighborhood and built environment:** food insecurity; housing, basic amenities, and the environment.
- **Social and community context:** social inclusion and nondiscrimination; structural conflict.

Icons representing these groupings are used in each section of the report to show the determinants that are discussed.

This report highlights the most disparate conditions in the limited available space. Important to note is that the determinants have other meanings, interpretations, and implications for various racial and ethnic groups beyond those explored in the literature presented here. For instance, social and community context may have one meaning for the health of White Americans but somewhat different implications for the health of Black, Hispanic, Asian/Pacific Islander, or Native American/Alaska Native communities. Further, each of these groups is highly diverse, with SDOH having unique meanings for people of South versus East Asian descent, Native Americans in various regions, or Black Americans with roots in the Caribbean versus Africa, for example.



Figure 1. The World Health Organization’s View on Social Determinants of Health and How They Interact to Affect the Health and Well-Being of the Individual



Source: Solar & Irwin, 2010.

Reproduced from “A conceptual framework for action on the social determinants of health. Social Determinants of Health Discussion Paper 2 (Policy and Practice),” Solar, O., & Irwin, A., Copyright (2010). https://apps.who.int/iris/bitstream/handle/10665/44489/9789241500852_eng.pdf. Accessed August 11, 2023.

Tips for Employers


Commercial Determinants of Health: Effects on Individuals and Populations

People’s health can be affected by the actions and omissions of private enterprises that change the social, physical, and cultural environments in which they work and live. Defined as commercial determinants of health by the WHO, businesses contribute to smoking, air pollution, alcohol use, obesity, and physical inactivity through the products and services they offer, the tasks required of employees and their working conditions, the environmental trail they leave behind, and the lobbying and advocacy roles in which they engage. Like social determinants of health, the commercial determinants of health directly or indirectly affect people’s health positively or

negatively through influences on the social, physical, and cultural environments (WHO, 2023).

In response to the commercial determinants of health, the WHO Council on the Economics of Health for All has developed ways to measure health and well-being and advocated for the use of tax policy to invest in and improve health outcomes (e.g., the taxation of tobacco products, energy drinks, and sugared soft drinks) (WHO, 2023). *The Lancet*, a British weekly medical journal, has started a series on commercial determinants of health to provide “recommendations and frameworks to foster a better understanding of the diversity of the commercial world, potential pathways to health harms or benefits, and the need for regulatory action and investment in enterprises that advance health, well-being, equity, and society” (*The Lancet*, 2023).

Examples of adverse effects on employees are lines of work that involve exposure to toxic materials or equipment that can damage the body permanently, occupations that require people to remain sedentary for long time periods, and actions that create or increase climate change denialism or vaccine hesitancy (WHO, 2023).

 How does your company or business affect the commercial determinants of health? In addition to minimizing the impact of actions on individual employees and the communities in which your business operates, the steps you are taking to address the commercial determinants of health make good public relations or advertising messages.



Across the Life Course: *Clean Air and Water, Safety, Connections, and Health Care*

Throughout life, people need physical and emotional safety, supportive loved ones and community members, quality health care, and clean air and water. Employers and communities provide much of the infrastructure and necessities for people to thrive. Without these SDOH over an extended time period, the resulting chronic stress leads people to have higher adrenaline levels and other flight-or-fight hormones affecting health in many organs and systems of the body.



Safety and Structural Conflict

Safety is a primary concern for people of all ages. When the WHO talks about “structural conflict” (WHO, n.d.), Ukraine, Sudan, and other areas with widespread conflict and danger come to mind. However, a person does not have to be in a war zone to feel the effects of conflict. Communities across the United States have neighborhoods where safety and conflict are concerns.

A few minutes spent visualizing advantaged versus disadvantaged neighborhoods helps to see how similar dynamics are occurring in every city, town, and village in the United States (*see image on page 14*). The [Neighborhood Atlas](#) maps the Area Deprivation Index onto the blocks used by the U.S. Census. The result is a graphic display of the areas of need, some of which are on opposite sides of a roadway or body of water, while others are islands of deprivation neighbored by people with plenty.

News reports often frame crimes and violence as problems of larger cities, but victimization correlates better with socioeconomic status than population

density. In a 2014 special report, the U.S. Department of Justice cited data from 2008 to 2012 showing that households at or under the federal poverty level were most likely to experience violent victimization, regardless of whether in urban, suburban, or rural areas. The same relationship held for low-, mid-, and high-income categories. More recent results show the same pattern, with a large increase between 2020 and 2021 in the frequency of violent crime in the lowest-income group (Figure 2) (Bureau of Justice Statistics, 2014; Bureau of Justice Statistics, 2022).

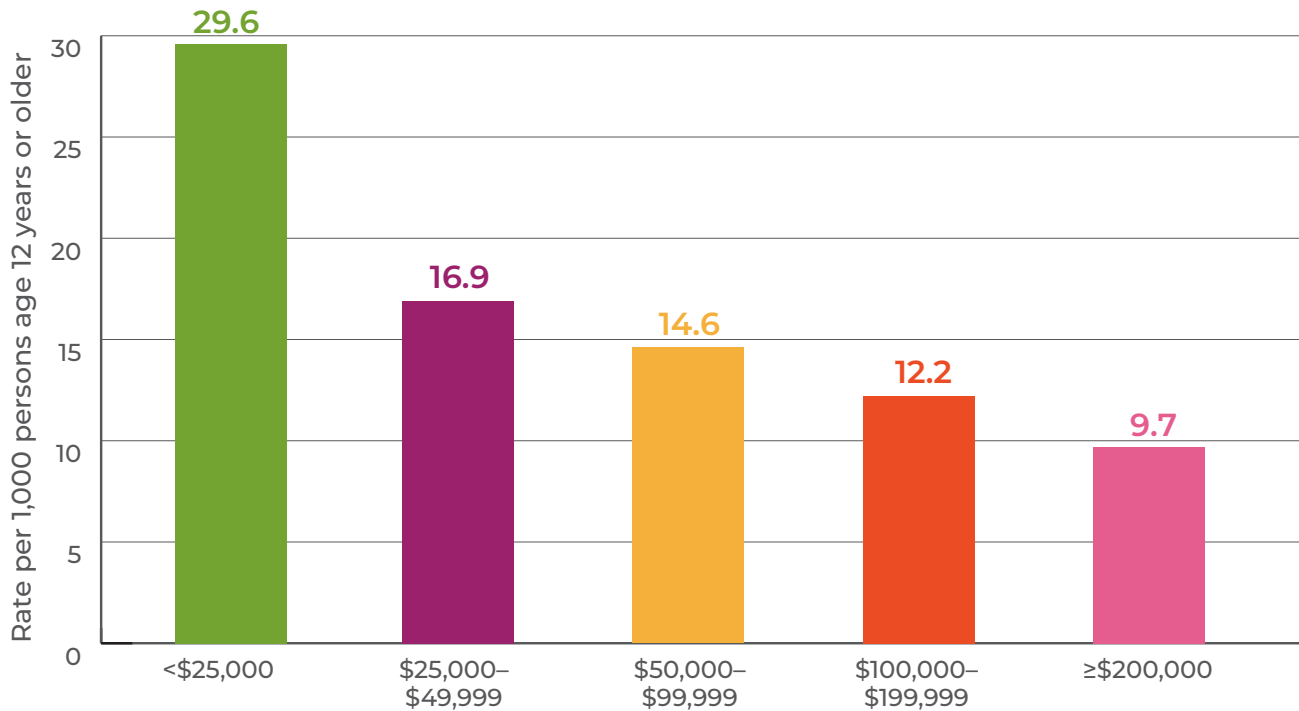
Another reality of violence is that much of it occurs in the domestic setting. In 2021, 20 percent of the 4.6 million reported acts of violence were committed by current or former intimate partners or family members (911,000 violent victimizations). Intimate partners committed just over half of those acts of violence (Bureau of Justice Statistics, 2022). Information on intimate partner violence is available from the [U.S. Department of Justice](#).



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Figure 2. Rates of Violent Victimization by Household Income of Victim, 2021



Rates are per 1,000 persons age 12 years or older. Includes rape or sexual assault, robbery, aggravated assault, and simple assault. Excludes homicide because the survey is based on interviews with victims.

Source: Bureau of Justice Statistics, 2022.



The Built Environment: Housing, Neighborhoods, and Basic Amenities

To maintain health across the life course, the built environment in communities is critical. Beyond safety and lack of conflict, neighborhoods can be designed so that necessary services are available, health can flourish or decline, and the quality and quantity of life are increased. Something as simple as sidewalks and walking/biking paths can make a large difference in the health and socialization of a neighborhood (Ige-Elegbede et al., 2020; Wang et al., 2021).

Resident activity increases with those features in the supportive built environment. Among documented benefits are the following (Ige-Elegbede et al., 2020):

- Features supporting physical activity are associated with lower risks of cardiovascular disease and mortality, prediabetes, and diabetes.
- Access to public transportation is associated with better mental health and fewer antidepressant prescriptions.

Poor quality of neighborhoods has been associated with functional loss among older adults, greater problems with the lower body in people with diabetes, and adverse effects on mental conditions. The amount of traffic, inadequate lighting and excessive noise, and proximity to high-power voltage lines are also linked to negative health effects. Conversely, children with asthma react negatively to proximity to green space because of allergens produced there (Ige-Elegbede et al., 2020).



Tips for Employers

Geographic Patterns in Relative Advantage/Disadvantage

Over the past two decades, connections have been established between health outcomes and the neighborhood in which a person lives. These place-based health disparities—whether their origin is financial, environmental, educational, social/familial, or something else—have led to the development of metrics for the relative advantages and disadvantages based on U.S. Census blocks. Neighborhood can be a proxy for many contributing factors, but the bottom line is that where a person lives gives clues to the SDOH affecting a person’s health. Nutritious foods may be located outside a walkable neighborhood, and lack of transportation options can limit access to them. The same is true for pharmacies, physicians, and other health care providers.

With research showing a widening gap in U.S. mortality based on income and other indicators of geographic deprivation, a neighborhood disadvantage index

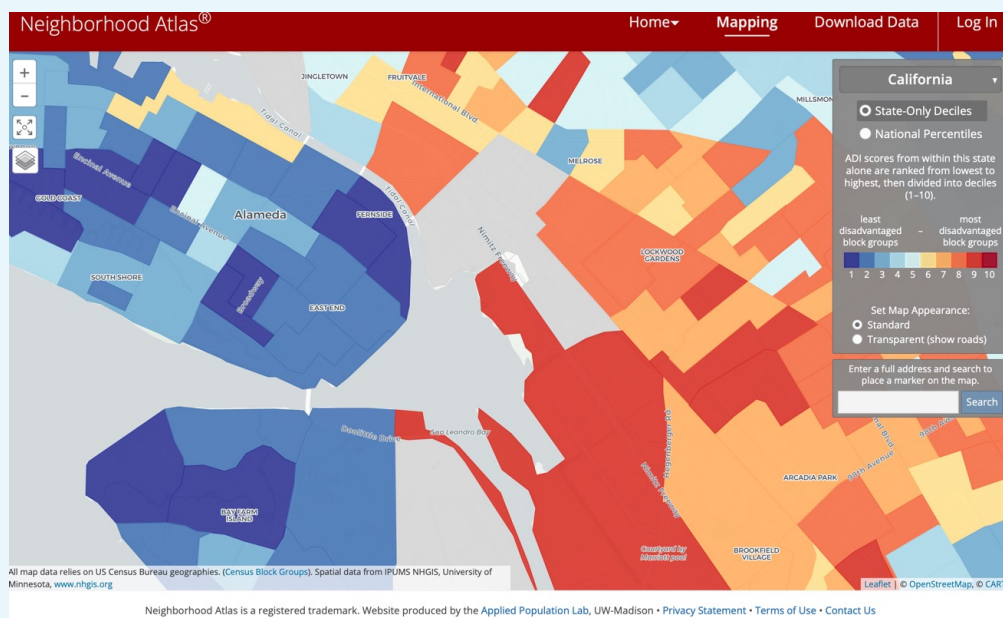
was developed, refined, and mapped for each U.S. Census block group in the United States. This open-access **Neighborhood Atlas** can be linked to electronic health records and used by health professionals and hospital-based social workers to consider what types of financial, transportation, access, and other challenges might compromise a patient’s medication or surgical treatments, office or clinic visits, and adherence with treatment plans (Kind & Buckingham, 2018; University of Wisconsin School of Medicine and Public Health, n.d.).

In an interview for the *New England Journal of Medicine* (Morrissey, 2018), one of the key neighborhood-disadvantage and geospatial researchers, Dr. Amy J. H. Kind of the University of Wisconsin School of Medicine and Public Health, described a vision for using these data in everyday medical practice:

“Just because someone lives in a rich area or lives in a poor area doesn’t mean that they necessarily carry those characteristics with them. But hopefully, it is something that can be a trigger for a discussion or trigger for additional thought around the way we deliver health

care, the types of medicines that are being prescribed, the types of surgical considerations both pre- and post-op that need to be put into place.... All too often, the social determinants of health are hidden within our health delivery system. Hopefully, [the availability of the Neighborhood Atlas] will increase the importance of these kinds of factors.”

Employers could take a similar step by connecting the Neighborhood Atlas to de-identified employee addresses; employers can visualize where employees live and have a better understanding of their everyday challenges. Employees may spend inordinate amounts of time using inconvenient public transportation options. Most employees like working from home, but people living in food or pharmacy deserts may prefer to come to the worksite to access needed services. By combining employee maps with knowledge of the surrounding geographic area, benefits managers can better design flexible benefits that meet the needs of employees living in different parts of a city or town or in rural areas.





Early Childhood:

The Start of a Life Well Lived

Beyond the determinants that affect health throughout life, other SDOH are important during early childhood: child development and early education, income and social protection, and social inclusion and nondiscrimination. Early childhood is a sensitive time of life. Interventions or traumatic experiences during this period will have lasting effects on a child’s cognitive, physical, behavioral, and psychomotor skills.

Employees who are parents of young children have a difficult time balancing work with the many tasks they do each day for their little ones. Not only does the time commitment affect their productivity, but parents who are worrying about where their child is and what the child is doing will not be fully present in the workplace. Family finances also become a factor. As discussed in the Adolescence and Young Adulthood section of this report, the median cost of childcare consumes a large portion of median earnings in many places in the United States, particularly for single parents.



The Home Environment and Early Education

Children benefit when parents and other caregivers engage with them physically, mentally, and emotionally. A stable home environment, social support systems, and a supportive, accepting neighborhood all help children grow and develop to their full potential. Children in homes where the parents must work multiple jobs, are absent physically or emotionally, or are financially stressed will be disadvantaged even before they begin their formal education.

In 2022, more than 73 million American children were in households under a variety of living arrangements (Figure 3). About 70 percent of children lived with both parents in their own homes, those of grandparents, or homes of other relatives or nonrelatives. Across all home settings, 27 percent of children lived with only one parent, usually the mother. The 3 percent of children with neither parent at home lived with their grandparents (1.3 million), other relatives or nonrelatives (1 million), or foster parents (300,000) (U.S. Census

Bureau, 2022a). The experience of growing up in a multigenerational home is increasingly common in the United States, and the presence of grandparents in a home can have a positive effect on child development and stability. In 2021, more than 1 in 4 American adults—66.7 million people—were living in multigenerational households, a 271 percent increase over 2011, with most growth happening during the pandemic (Generations United, 2023).

An important longitudinal study of early childhood began in 1985–1986 in Chicago’s challenging, high-poverty neighborhoods. Participants were low-income minority children (Black, 93 percent) who were followed as they matured into adulthood. By age 26, about one-quarter of this panel had been jailed, incarcerated, and/or convicted of felony crimes. The factors significantly associated with these adverse outcomes could mostly be traced back to the child’s home and parents or other caregivers, the

need for welfare services before 4 years of age, a negative home environment, maltreatment experience, trouble-making behaviors, and the number of times children changed schools (Ou & Reynolds, 2010).

The negative home environment found to be significant in the Chicago study emphasizes the key role of parents with stable relations, continuous employment, and limited residential mobility. When a parent is absent—most likely the father—childcare, housekeeping chores, emotional support, and managing finances fall on the remaining parent. While the mother’s role is associated in most people’s minds more closely with nurturing of the child, a father figure—natural father, stepfather or grandfather, or another close male friend of the family—can improve social, behavioral, and psychological outcomes by spending time and engaging with the child (Cabrera et al., 2018).

Childcare responsibilities can conflict with the demands of parents' employment. For families with low incomes—which many times also means no paid leave—and children younger than 13 years of age, an illness or transportation problem can cause a parent to get to work late, miss shifts, and not complete the required work. Income drops while stress levels rise. When such situations occur frequently, job security may be threatened, further magnifying the impact on the family. About one-quarter of parents with low incomes experienced issues with childcare that regularly disrupted their work schedules in a study sponsored by the National Research Center on Hispanic

Children and Families. For about 1 in 10 households, these disruptions occurred as frequently as 2 work weeks per quarter (Ferreira van Leer et al., 2021).

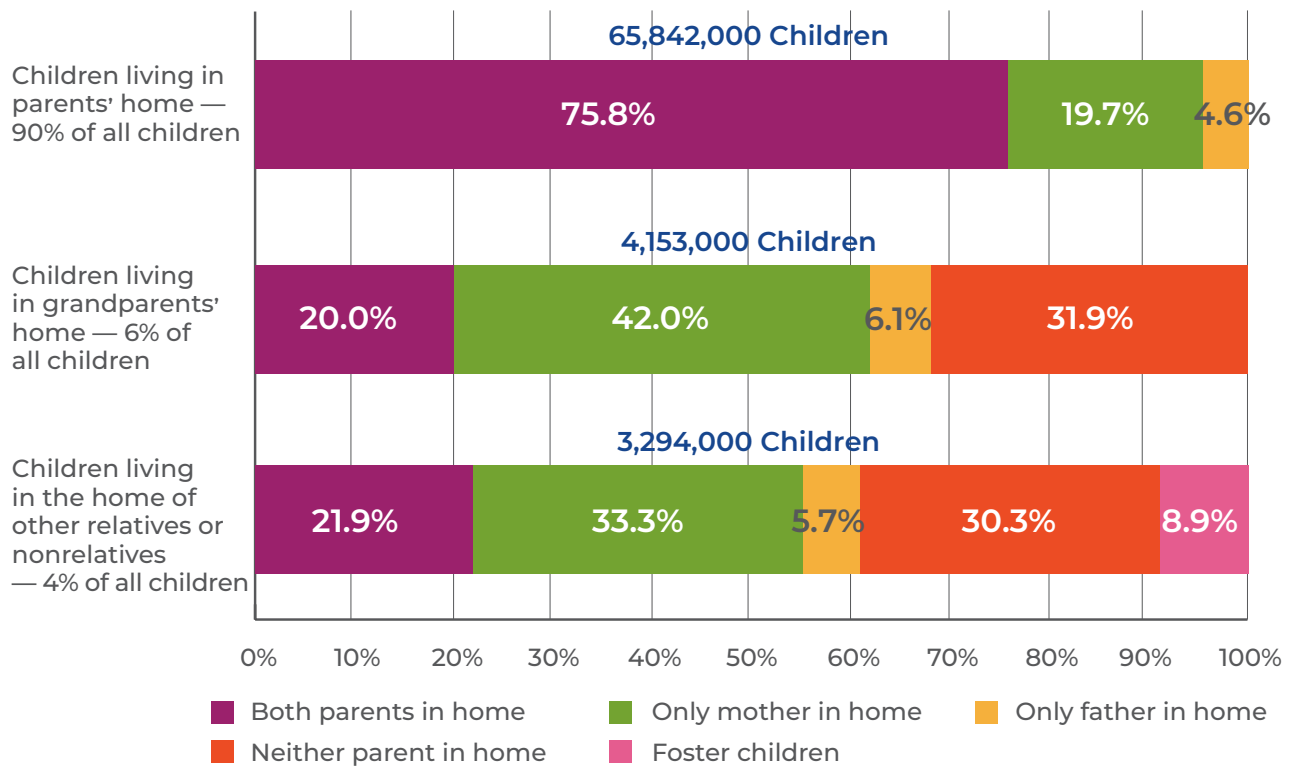
A growing body of evidence shows that high-quality, full-day educational programs at 3 or 4 years of age can develop cognitive and socioemotional skills needed to be ready for school. Early childhood education is particularly beneficial for children from disadvantaged backgrounds. These programs also have societal benefits and positive long-term economic returns, but they must be followed by further quality education and attention to home and community factors (Hahn & Barnett, 2023).

~1/4
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Figure 3. Living Arrangements of American Children (N = 73,289,000), 2022



Source: U.S. Census Bureau (2022a).



Chronic Stress and Allostatic Load

In contrast to the benefits of early childhood education, chronic stress is detrimental. Stress may result from childhood mistreatment, family stress from inadequate or unstable income, early direct experiences with racial or other discrimination or secondary effects of discrimination in housing and education, absence of family members (including those unable to make bail from jails or in prisons), and microaggressions (indirect, subtle, and sometimes unintentional discrimination based on stereotypes or prejudices). The long-term effects of such stress—also known as high allostatic load

or weathering—are only beginning to be realized (DeVita-Raeburn, 2018).

In this context, stress refers to events that evoke behavioral or physiologic reactions and not just the frustration of being late for school or performing poorly on a test. The body responds to a chronic state of stress by making detrimental physical and mental changes. These can lead to conditions such as hypertension, chronic fatigue, depression, or anxiety. For young children, chronic stress can lead to inappropriate behaviors or responses in interactions with teachers and other

authority figures (DeVita-Raeburn, 2018; de la Rosa et al., 2023).

Early health deterioration among Black individuals, which previously has been attributed to genetics or racial differences, may, in fact, be the result of years of underlying stress and its effects on the body. Differences in birthweight between White and Black mothers have been associated with living in poverty and other conditions that produce chronic stress in young mothers (DeVita-Raeburn, 2018; de la Rosa et al., 2023).



Tips for Employers

Life on the Edge: United Way's ALICE Program


While Americans financially below the federal poverty level have safety net options, those making more than the federal poverty level but not enough to cover basic household expenses in their locale are caught in a gap. The United Way has implemented the [United for ALICE](#) project to focus specifically on families that are **A**sset **L**imited, **I**ncome **C**onstrained, and **E**mployed.

Nationally in 2021, 13 percent of the 127 million households in the United States were below the federal poverty level. Another [29 percent were ALICE](#), making above the federal poverty level but not enough for basic services in their community. In 2019, the number of households under the ALICE threshold was 49.8 million (including households under

the federal poverty level plus the ALICE households). As the pandemic created economic turmoil, this figure rose to 52.5 million in 2021.

A few minutes of exploring the project's [Wage Tool](#) provides insights into the challenges faced by people at various income levels. For instance, if both adults in a family of four are working at an average wage of \$14 per hour—nearly twice the federal minimum wage of \$7.25—they would be able to meet a survival budget in only 2 percent of U.S. counties, primarily located in the Mississippi Delta regions of Mississippi, Arkansas, and Louisiana. With the federal minimum wage unchanged since 2009, it is noteworthy that only households with two adults working and no children could meet their expenses at that income level. Included in the survival budget are the costs of housing, childcare, food, transportation, health care, and a smartphone plan, plus taxes and a small contingency.

Many states have raised their minimum wage, but these remain at or below the survivability cusps in many areas. For instance, the [Economic Policy Institute's interactive minimum wage tracker](#) shows California has a minimum wage of \$15.50. A family of four in expensive areas such as Los Angeles and Santa Barbara could reach survivability wages only when both adults make an average of about \$25 per hour, according to the ALICE Wage Tool.

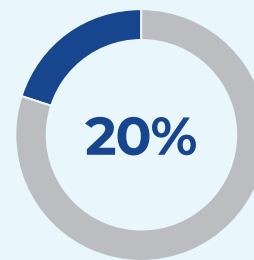
 Employers can help ALICE families by supporting the United Way and making sure an ALICE program is operating in their communities. The ALICE project operates through local United Way organizations, which receive substantial support from companies through payroll deductions. For instance, the [United Way of Western Connecticut](#) connects ALICE households to social services, business discounts, government resources, and other resources

to help lessen the cost of living, reduce family stress, and support their ability to save in a project also funded by federal monies. By focusing on social responsibility, [Entergy created a 5-year, \\$5 million initiative](#) to provide workforce training to equip unemployed and underemployed adults for high-demand, high-wage jobs in their communities. [Entergy](#) also supports organizations with established track records of helping ALICE families take advantage of the [earned income tax credit](#). The company says 20 percent of eligible families do not take advantage of this highly effective poverty-alleviation program.

⚙️ Helping low-wage workers with children younger than 13 years of age in navigating the effects of childcare challenges is an important role for employers. Examples of helpful benefits are providing paid leave for periods of children’s illnesses, emergency or [backup childcare](#) for low-wage earners, and loans to cover loss of income. [Employer-paid tutoring benefits](#) are useful for home-based workers and those wanting to provide educational after-school activities.

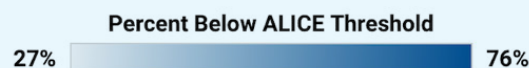
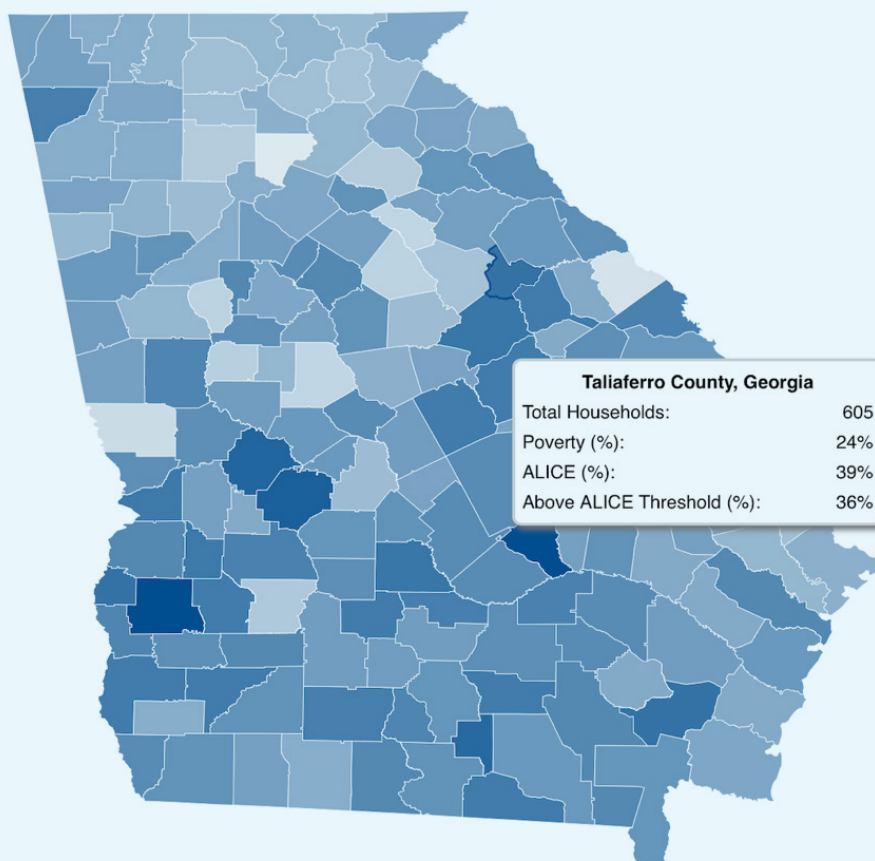
⚙️ Employers can also use the [United for ALICE calculator](#) to see how people are doing in the counties where you operate. If [ALICE](#)

[programs are operating in these areas](#), contact them to see how your company or business can help people living on the edge to get the help they need.



of eligible families do not take advantage of ALICE, a highly effective poverty-alleviation program

County-Level Details, 2021





Adolescence and Young Adulthood:

Times for Decisions and Growth

The SDOH are not the only influences on a person's health and life. Chief among the other influences are a person's individual choices and preferences. Growing up in the most advantaged or disadvantaged neighborhood does not prevent people from changing their life trajectory during adolescence or young adulthood through the decisions they make or opportunities they pursue. A child who has overcome previous disadvantaged circumstances can still prepare in middle and high school for a chosen career, and that groundwork can maintain or even improve prospects for success in life and better health in later years.

Career choices, decisions about education and lifestyle, and life commitments such as partners and children dominate adolescence and young adulthood. These have an oversized influence on several SDOH, including employment, job security, working life conditions, and the types of housing, food, and health care a person can afford or access through employment or other earned income.



The School-to-Somewhere Pipeline

The effects of neighborhood have an outsized influence as children transition into puberty and adolescence. Educational outcomes are worse for those from disadvantaged neighborhoods, but geography is likely a proxy for other more important factors. In a large study that sought to identify the most direct factors, individual educational outcomes were associated with levels of neighborhood poverty (e.g., proportions of poor and rich households, number of single mothers, the proportion of homeowners), a poor educational climate, the proportion of ethnic/migrant groups in the neighborhood, and social disorganization in the neighborhood (e.g., crime/disorder, poor physical conditions, residential stability). The negative effects of a poor educational climate have been more important in studies conducted in the United States than in Europe (Nieuwenhuis & Hooimeijer, 2016).

During this part of life, schools serve a funneling purpose by taking a cohort of students and sending some to selective 4-year colleges while others go to less

selective institutions or trade schools, jobs requiring limited skills, or a life on the streets or in the legal systems. In this process, the cumulative advantage enjoyed by young people from families and schools with higher socioeconomic status is predictive of positive outcomes. Strict policies in middle and high schools that mandate the involvement of law enforcement when students violate rules and laws result in more of these students ending up in jails or prisons, dropping out of school, and getting involved in crime. Black and Hispanic students have been disproportionately affected by such policies and enforcement mechanisms (Tompsett & Knoester, 2023; Robinson, 2023).

Employers and communities can help make a positive difference in young people's lives by making sure they know about all their options. For high-achieving students from disadvantaged backgrounds, information on scholarships is critical. Students with greater interest in hands-on careers and a desire to quickly enter the workforce should be exposed to the advantages of

trade schools over universities: lower tuition, shorter programs that focus only on the needed skills, and more opportunities than are available with only a high school diploma (Carnevale & Cheah, 2018).

The Georgetown University Center on Education and the Workforce listed these five "rules of the college and career game" (Carnevale & Cheah, 2018):

- Education still matters, and generally more education is better.
- Education level matters, but the program of study and majors matter even more.
- While the field of study is important, it does not control one's destiny—there is great variation in earnings within majors.
- Less education can be worth more (e.g., trades can pay better than some college majors).
- Humanities and liberal arts majors never catch up with the highest earning majors.



Marriage, Partnerships, and Children

Beyond career and employment, the big decisions of young people involve partnerships, marriage, and children (including teen and other unplanned pregnancies). The demographic shifts over the past half century have changed life for young adults in the United States in several ways: fewer marriages and more unmarried partners, more people living alone, fewer children being born, birth rates climbing among women in their 40s, and more women working but (still) for less pay than men.

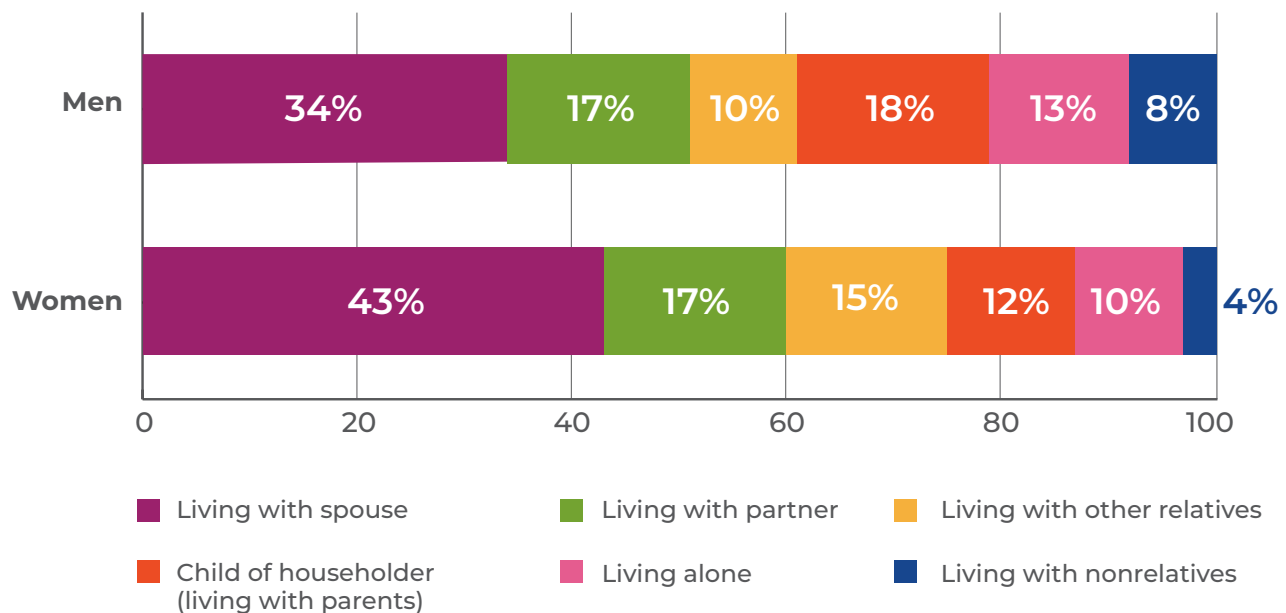
From 70.3 percent in 1967, the percentage of 25- to 34-year-old people living with a spouse dropped to 50.1 percent in 2022. People living with unmarried partners increased 20-fold, from 0.4 percent to 8.2 percent. Adults are much more likely to live alone (14.9 percent in 2022 compared

with 7.6 percent in 1967). The percentage of adults living with their parents has been relatively stable at 10 percent to 12 percent. About one-third of unmarried couples had children in 2022 (U.S. Census Bureau, 2022b, 2022c).

In 2022, gender differences in living arrangements were noticeable for 25- to 34-year-old Americans. Compared with women, larger percentages of men lived alone or with parents or nonrelatives; women more often lived with a spouse or other relatives (Figure 4). More than 80 percent of women younger than 30 years of age had never married, and the median age of first-time marriage for women has increased steadily from the early 20s in the 1960s to nearly 29 years of age in 2020 (U.S. Census Bureau, 2022d).

The U.S. birth rate dropped in the early 1970s and again following the Great Recession in 2008–2009 (Figure 5). Birth rates have decreased for younger women and increased among women in their later childbearing years (Figure 6). The United States remains below the generally accepted replacement rate of 2.1 births per woman required for a population not to shrink without immigration; the current rate is 1.7 births per woman. About half of all pregnancies in the United States are unplanned; these have accounted for 37 percent of all births (Erbabian & Osorio, 2022; United Nations, 2015; Osterman et al., 2023).

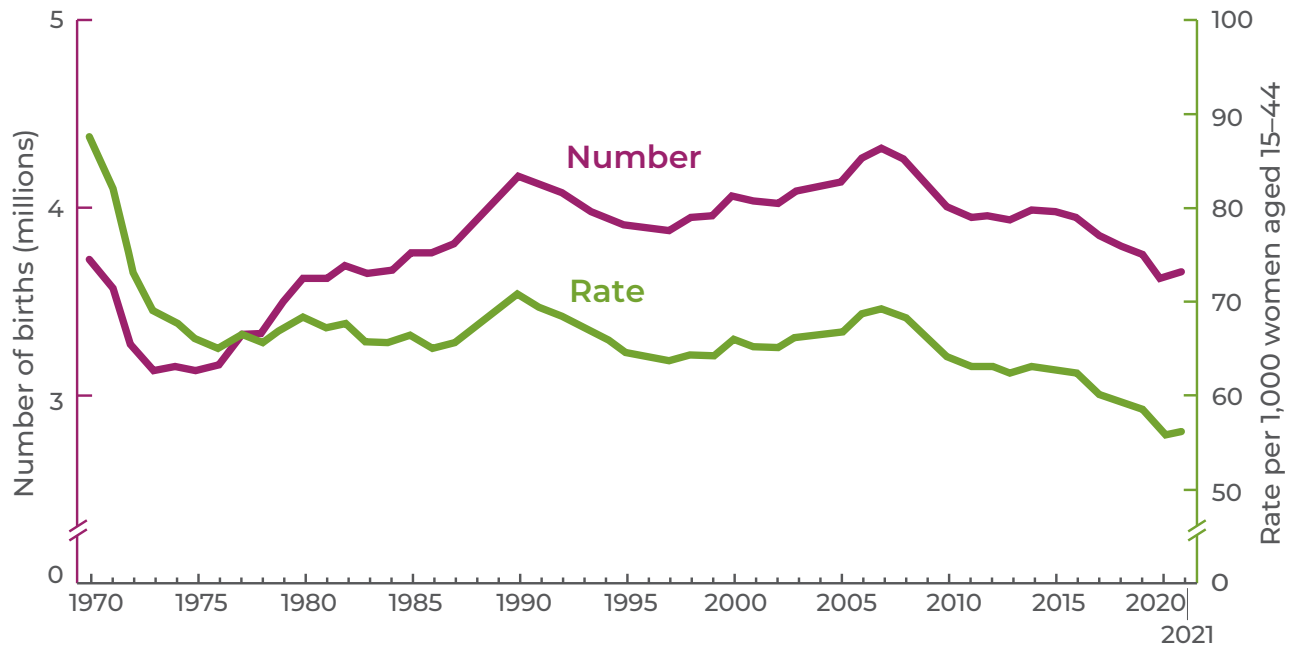
Figure 4. Living Arrangements of Americans, 25–34 Years Old, 2022



Note: The householder is a person who owns or rents the housing unit (i.e., the person whose name appears on the deed or lease).

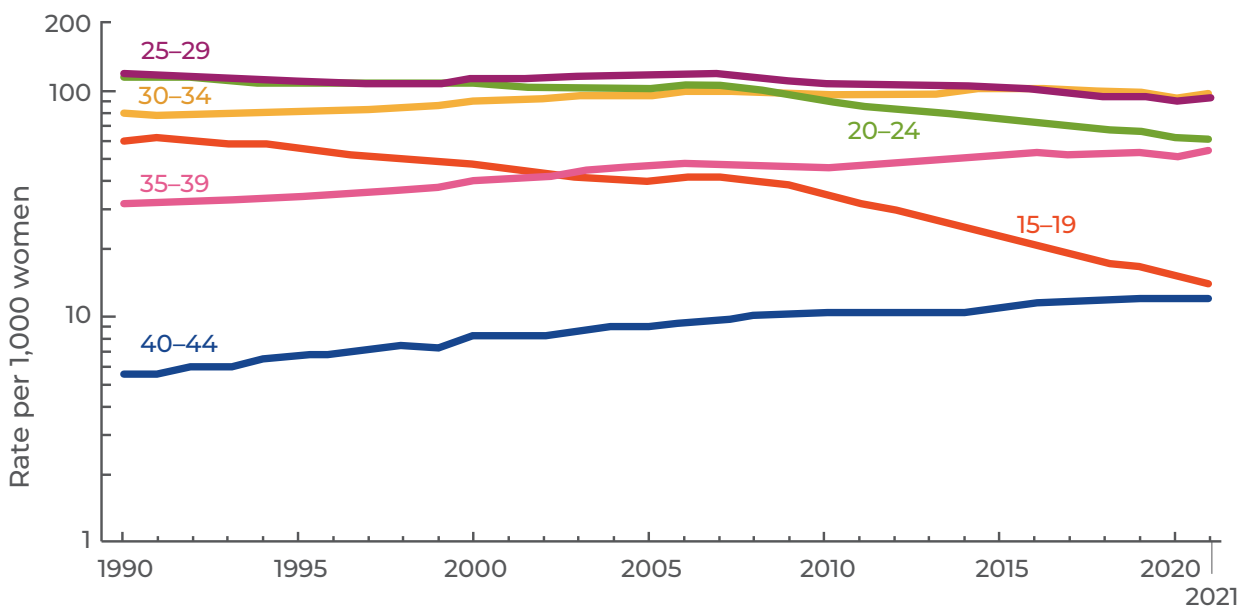
Source: U.S. Census Bureau, 2022c.

Figure 5. Live Births and General Fertility Rates: United States, 1970–2021



Source: National Center for Health Statistics, National Vital Statistics System, Natality, as reported in Osterman et al., 2023. The 2020 rate shown in this figure was revised by Osterman et al. from that published in the original source as “Births: Final Data for 2020.”

Figure 6. Birth Rates, by Selected Age of Mother: United States, 1990–2021

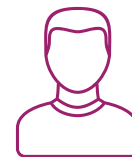


Source: National Center for Health Statistics, National Vital Statistics System, Natality, as reported in Osterman et al., 2023. The 2020 rate was revised by Osterman et al. from that published in the original source as “Births: Final Data for 2020.” Rates in this figure are plotted on a logarithmic scale.

Even though women are a growing segment of the U.S. labor force, they do not earn as much as men, are less likely to be promoted, and continue to handle a disproportionate share of childcare and household duties, according to LeanIn.org, a nonprofit organization founded by Sheryl Sandberg, who at that time was the chief operating officer of Meta. Remote and hybrid work can make childcare more easily managed, although the working conditions may be challenging. Microaggressions are fewer among women and people of color who work remotely. As employees climb the corporate ladder, White men are disproportionately represented, while White women, men of color, and women of color are passed over (McKinsey and Company & LeanIn.org, n.d.; Bureau of Labor Statistics, 2022).

The pay gap between men and women translates into less income for women overall and a wealth penalty for single women with children, with those of color affected more. Financial cushions as the COVID-19 pandemic began are shown in Figure 7. Single men have greater wealth with children than without them, while single women have one-tenth the wealth with children than they do without children. Single women of color have very little wealth, even without children (Hernández Kent, 2021).

The marital status section of Figure 8 further illustrates the wealth advantage of marriage. Whether male or female, unmarried individuals have only a fraction of the wealth accrued by married couples (U.S. Census Bureau, 2023a).

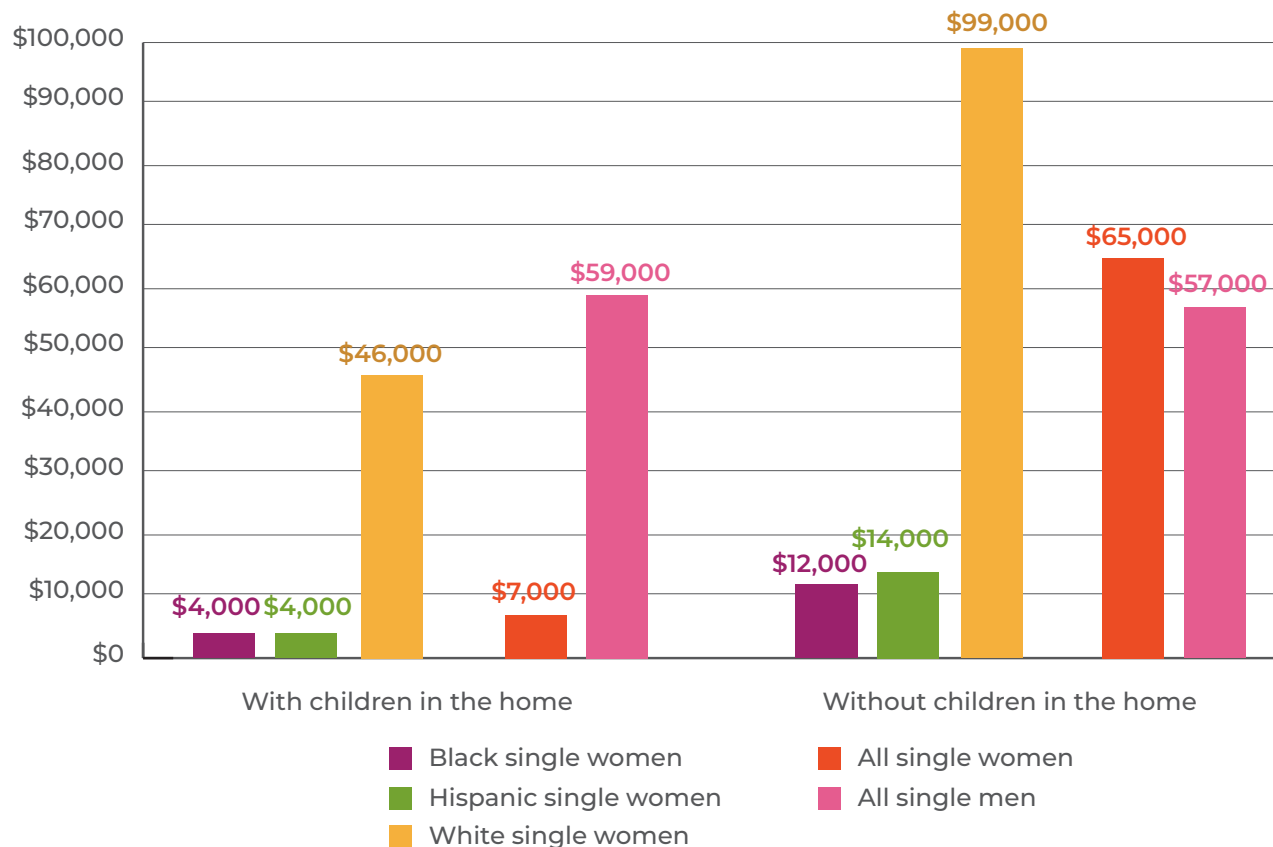


Single men have greater wealth with children than without them



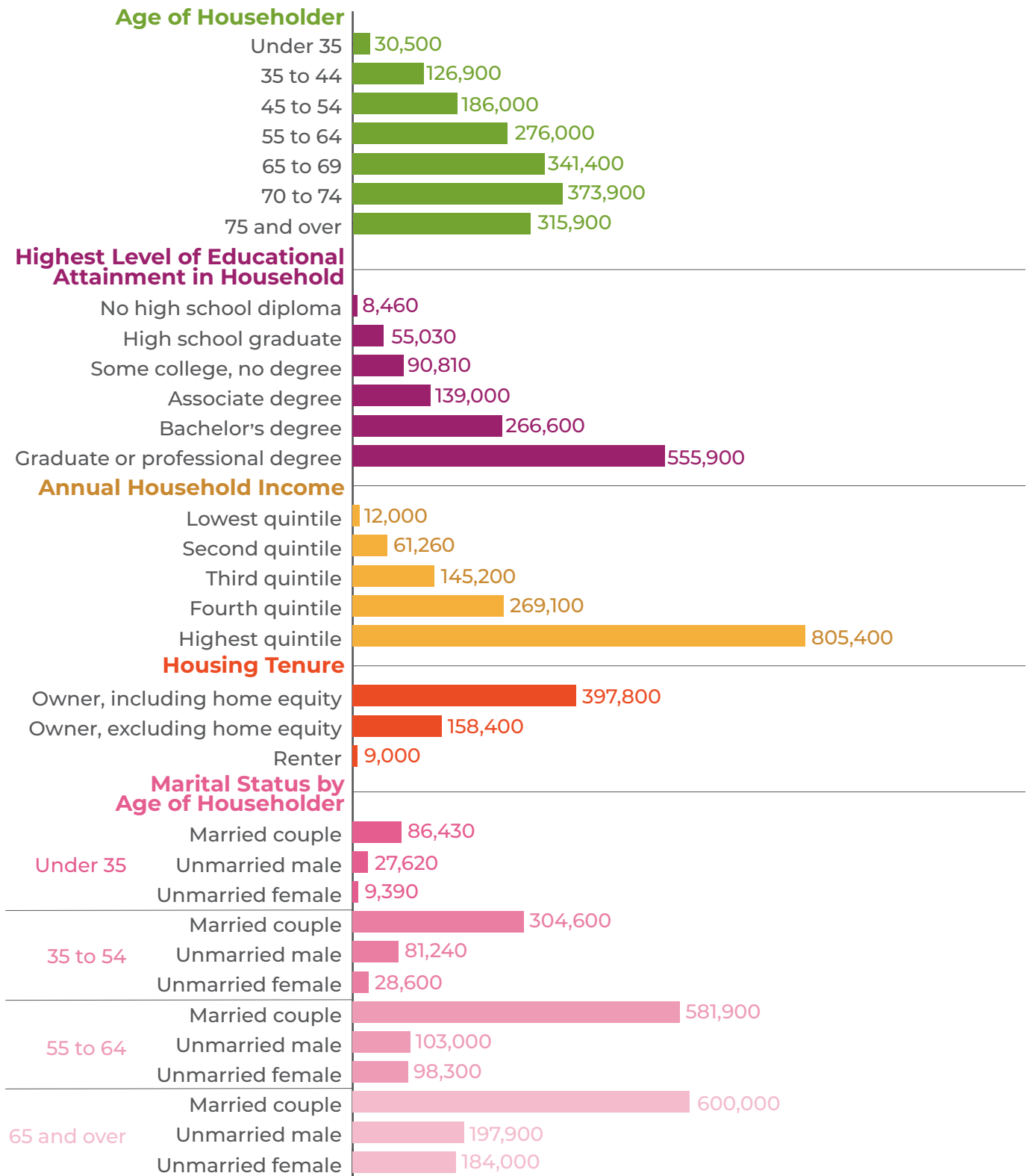
Single women have **one-tenth** the wealth with children than they do without children

Figure 7. Wealth of Single Adults With and Without Children in the Home by Race, 2019



Source: Hernández Kent, 2021.

Figure 8. Median Wealth of Americans by Household Characteristics, 2021



Note: The householder is a person who owns or rents the housing unit (i.e., the person whose name appears on the deed or lease). In the education section, "some college, no degree" and "associate degree" categories include most trade schools.

Source: U.S. Census Bureau, 2023a.

Since employment rates for single women with children decreased more than for other groups during the pandemic, the lack of 2019 wealth translated into an inability to pay bills in full in November 2020, just getting by each month, and worse financial shape than a year earlier (Hernández Kent, 2021).

As mentioned in the Early Childhood section of this report, paid childcare is a challenge and a drain on the monthly budgets for single- and dual-parent households. The median annual cost of childcare for one child ranges from \$5,357 to \$17,171 in the United States, consuming 8.0 percent to 19.3 percent of the median family income. Single parents can expect to spend 24.6 percent


to 75.1 percent of their family income on childcare. In 2021, in all 49 states with data and the District of Columbia, the cost of childcare exceeded the average rent. Childcare costs cause women to leave the workforce; when a county's median childcare costs increased by 10 percent, maternal employment rates dropped by 1 percentage point (U.S. Department of Labor, 2023a, 2023b).



Tips for Employers

Promoting Health in the Workplace

From chef-created healthy foods to onsite massage therapists and wellness centers, the Silicon Valley technology industry for many years led the way in creating unique benefits to attract and retain employees—and keeping them happy as they worked deep into the night. While not all businesses can go that far, there are many ways employers can promote health to help workers stay (or become) physically and mentally fit. Even without long hours expected at Apple and Google, employees everywhere spend the majority of their waking hours on job-related tasks or activities.

 The Centers for Disease Control and Prevention (CDC) Workplace Health Promotion webpage has great health-positive ideas for businesses to consider. The CDC Worksite Health 101 Training Manual is very useful for identifying potential benefits that can be presented to employees and advisory committees for their reactions.

For starters, consider these approaches for promoting health among employees:

- **Smoke-free workplace:** Smoke-free policies reduce the harmful effects of smoking and secondhand smoke (see CDC website).
- **Employee fitness opportunities:** Onsite gym and walking routes; for work-from-home employees, gym memberships and information about community resources for aerobic and resistance exercise.
- **Body composition analyzers:** Either onsite or in the community, provide access to devices for tracking changes in the body's water, fat, protein, and minerals.
- **Workplace lactation rooms:** Lactation support (see CDC website).
- **Workplace healthy food access:** Healthy workplace food and beverage toolkit (see American Heart Association website).
- **Workplace culture that reduces psychological stress:** Consider management options focusing on the demands of different types of work in the business, the control employees have over their work, support the company provides, and ways of handling relationships, roles, and change (see Health and Safety Executive website).





Middle Adulthood: *Challenges and Opportunities*

In middle adulthood, past cumulative advantages and disadvantages are amplified. Realities sink in about one's past decisions and family health history, the challenges of finding new employment, and a lack of financial resources.



Living Longer, If You Have Enough Money

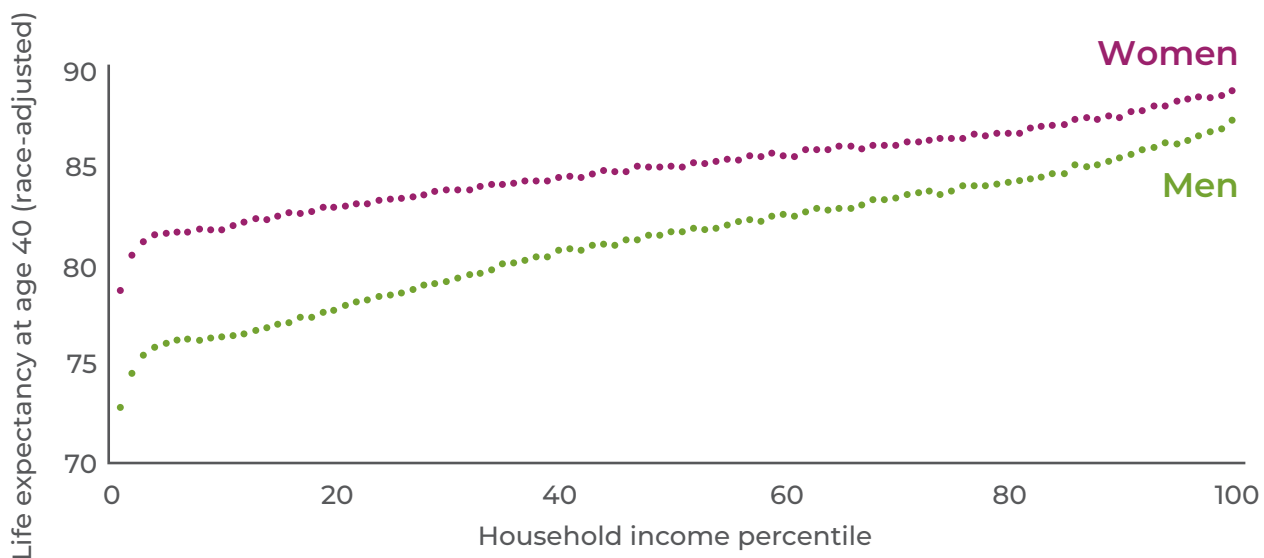
As people age, cumulative advantages include more than material possessions. Data for the 2000–2014 period show a linear relationship between income at age 40 and life expectancy. Below the 10th percentile, the drop is exponential. The net result of these patterns is longer life expectancy for high-income individuals

(15 years for men and 10 years for women) (Figure 9) (Chetty et al., 2016; Health Inequality Project, n.d.).

Where a person lives also appears to matter (Figure 10). For people in the bottom quartile of income, the five U.S. cities with the longest life expectancies at age 40 are

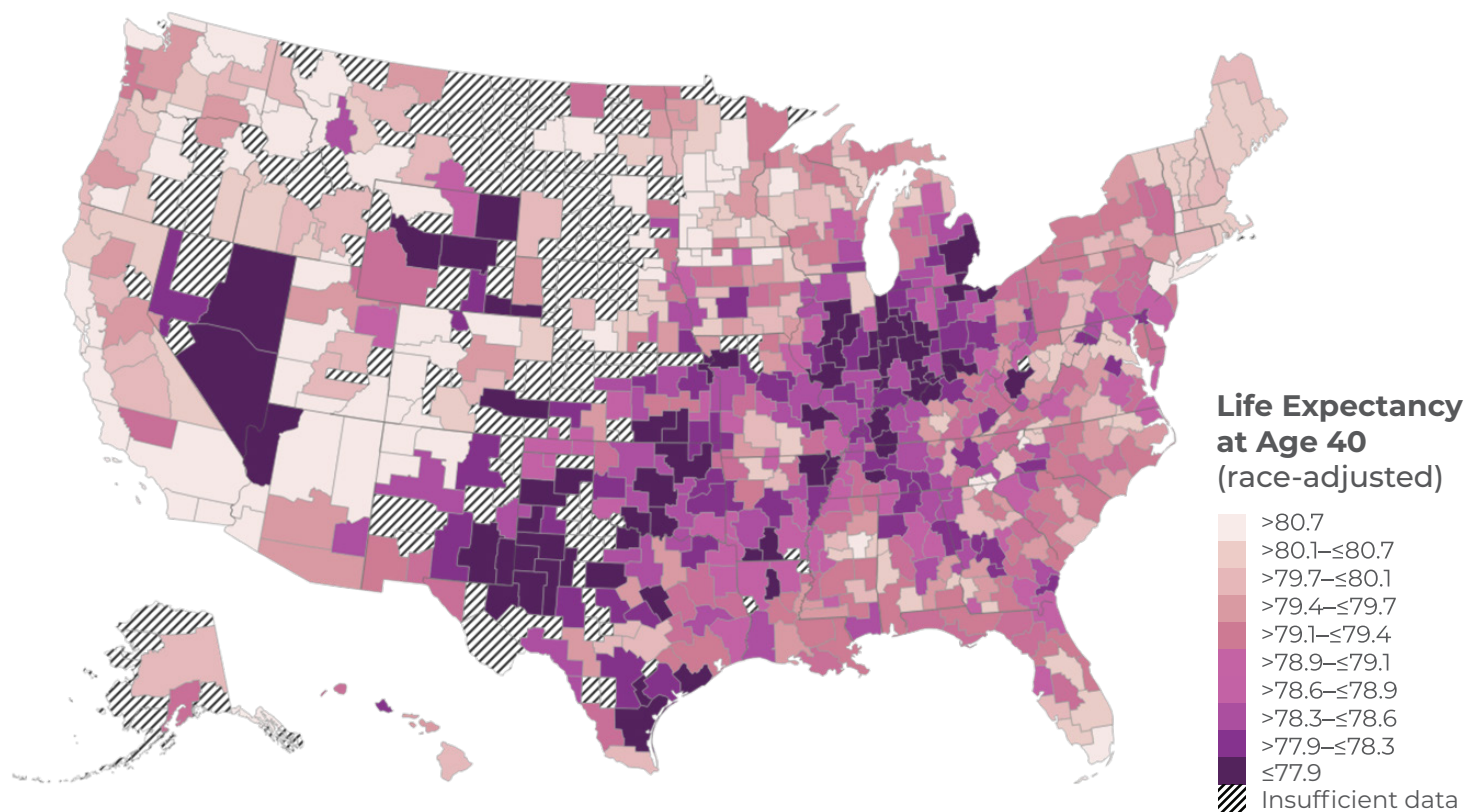
all on the coasts: New York City and Miami in the east and the California cities of Santa Barbara, San Jose, and Los Angeles in the west. Tulsa and Oklahoma City, Oklahoma, Indianapolis and Gary, Indiana, and Las Vegas, Nevada, are the five U.S. cities with the shortest life expectancies (Health Inequality Project, n.d.).

Figure 9. Life Expectancy at Age 40 by Income Levels in the United States



Sources: Chetty et al., 2016; Health Inequality Project, n.d.

Figure 10. Geographic Patterns in Life Expectancy for People in the Bottom Quartile of Income



Source: Health Inequality Project, n.d.

To have income, most people need jobs. However, participation in the workforce during middle adulthood has varied in recent years. As shown in Figure 11, men born in the 1930s had higher participation rates throughout young and middle adulthood. Workforce participation for both men and women born in the 1960s appears to have been affected by the Great Recession in 2008–2009 (when they were in their 40s) to a greater degree than the other groups.

Another way of looking at labor participation rates is by educational level. The more education a person has, the more likely that person is to be employed throughout life (Figure 12). College graduates have the highest labor participation rates throughout the working years (and make the highest salaries), followed by those with some college or who completed associate degrees or trade schools, and then high school graduates.

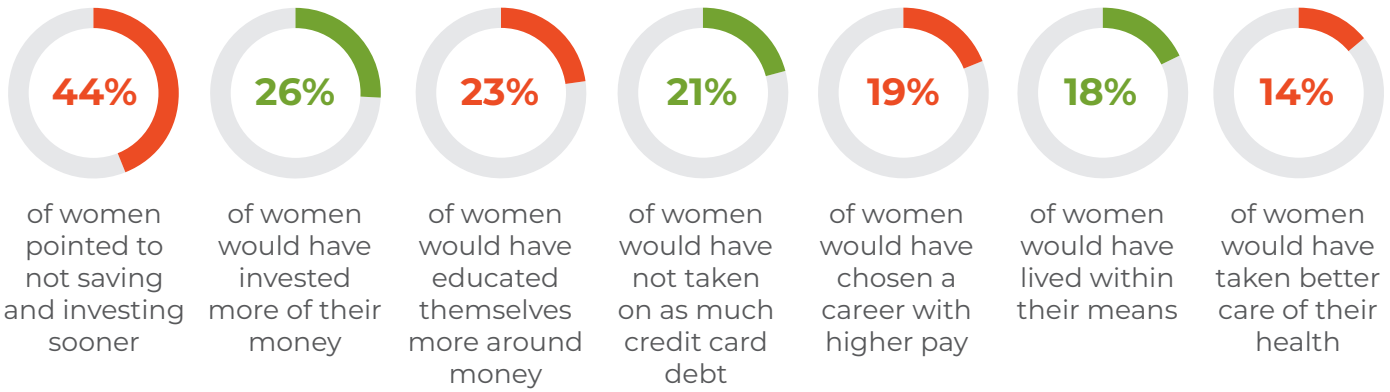
Fewer women are in the labor force compared with men, and those working tend to retire earlier. Women without a high school diploma are at a particular disadvantage. Fewer than half are employed at any point during adulthood, and very few work past their early 60s when Social Security benefits can be accessed (Berkman & Truesdale, 2023).

In addition to working fewer years than men, women’s average salaries are lower, and women save a lower percentage of their salaries for retirement than men. They also make less risky investments that lower the growth of their nest egg. Social Security income is lower because it is pegged to income. According to a Bank of America Institute retirement survey, the net result of these trends is that women enter retirement with much lower retirement fund balances. Since they also live longer than men, their odds

of outliving savings are greater (Bank of America Institute, 2023).

When asked in an earlier survey about their financial regrets, nearly half of women (44%) pointed to not saving and investing sooner. Women also say they would have invested more of their money (26%), educated themselves more around money (23%), not taken on as much credit card debt (21%), chosen a career with higher pay (19%), lived within their means (18%), and taken better care of their health (14%) (Bank of America, 2022).

On a positive note, younger women in the study (22 to 30 years of age) were more comfortable having financial conversations than women 65 years of age or older; this included talking with financial advisors (73% vs. 64%), applying for new or better positions at work (74% vs. 42%), discussing new investment opportunities



(65% vs. 44%), and asking for a raise (59% vs. 38%) (Bank of America, 2022).

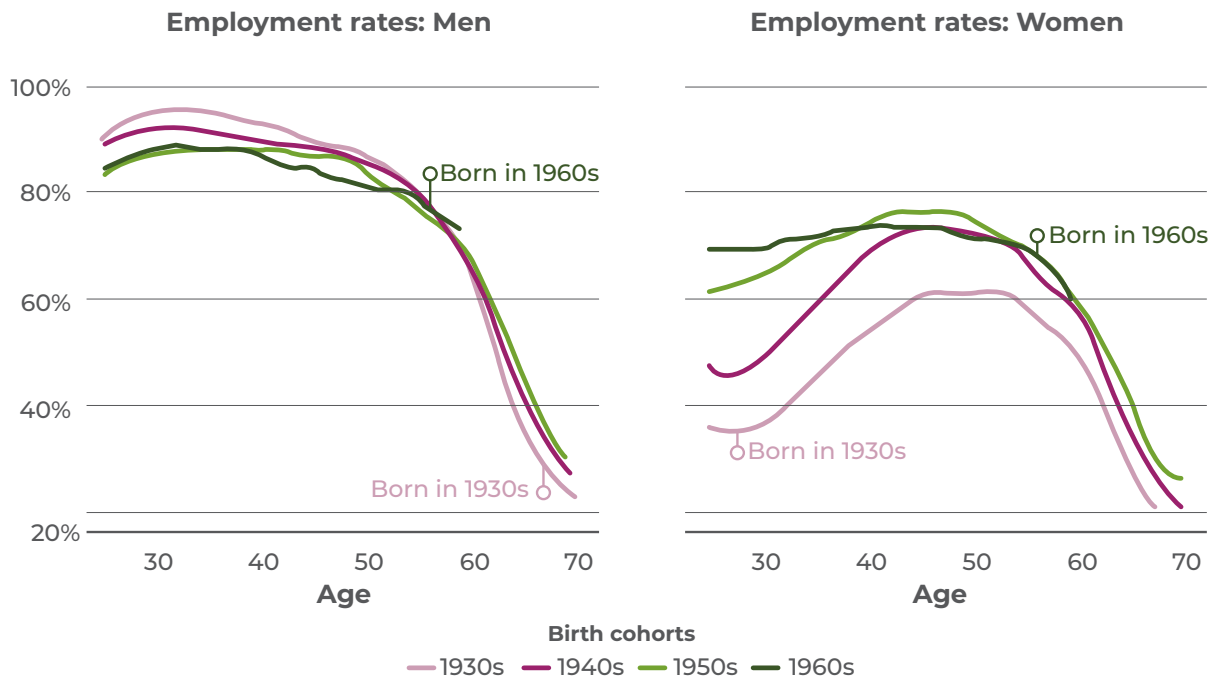
Suicide and drug overdose rates were associated with declining life expectancy in the United States even before the precipitous drop during the COVID-19 pandemic. The 45- to 64-year-old age group has had the highest rate of suicide, with men at greatest risk; across age groups since 2000, the suicide rate in 2020 among men was 3 to 4 times higher than

for women. Possible reasons for suicide include economic turmoil and challenges in recent decades that disproportionately affected less educated men, untreated or unmanageable psychiatric disorders such as depression and schizophrenia, and substance use disorders, including opioids and alcohol (Garnett et al., 2022; Geronimus et al., 2019).

Overdose deaths involving opioids were increasing before the pandemic, driven by

fentanyl present in street drugs (Figure 13). Drug overdose deaths involving opioids of all types (some of which were legally prescribed drugs used inappropriately) increased 15 percent in 2021 and were highest among Americans aged 35 to 44 and 45 to 54 years. The largest percentage increase in drug overdose deaths for 2021 was among Americans aged 65 years or older (28 percent), followed by the 55 to 64 age group (21.5 percent) (Spencer et al., 2022).

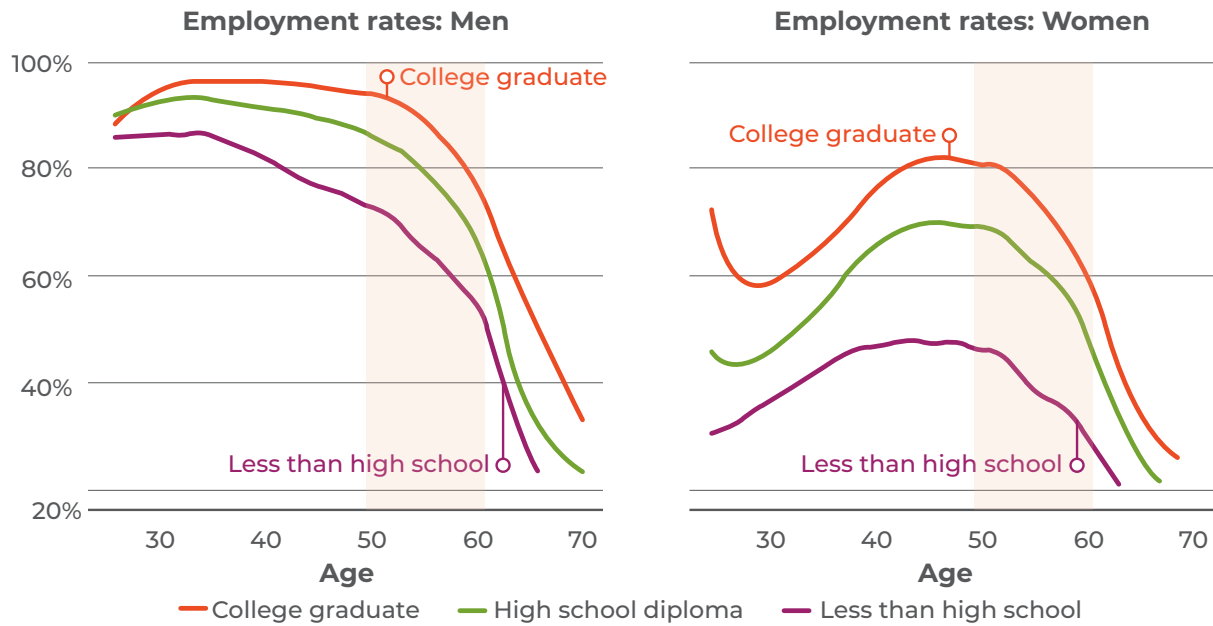
Figure 11. Employment Rates of Americans by Birth Cohorts



Source: Berkman & Truesdale, 2023.

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Figure 12. Employment Rates of Americans by Educational Level for Those Born in 1930–1959

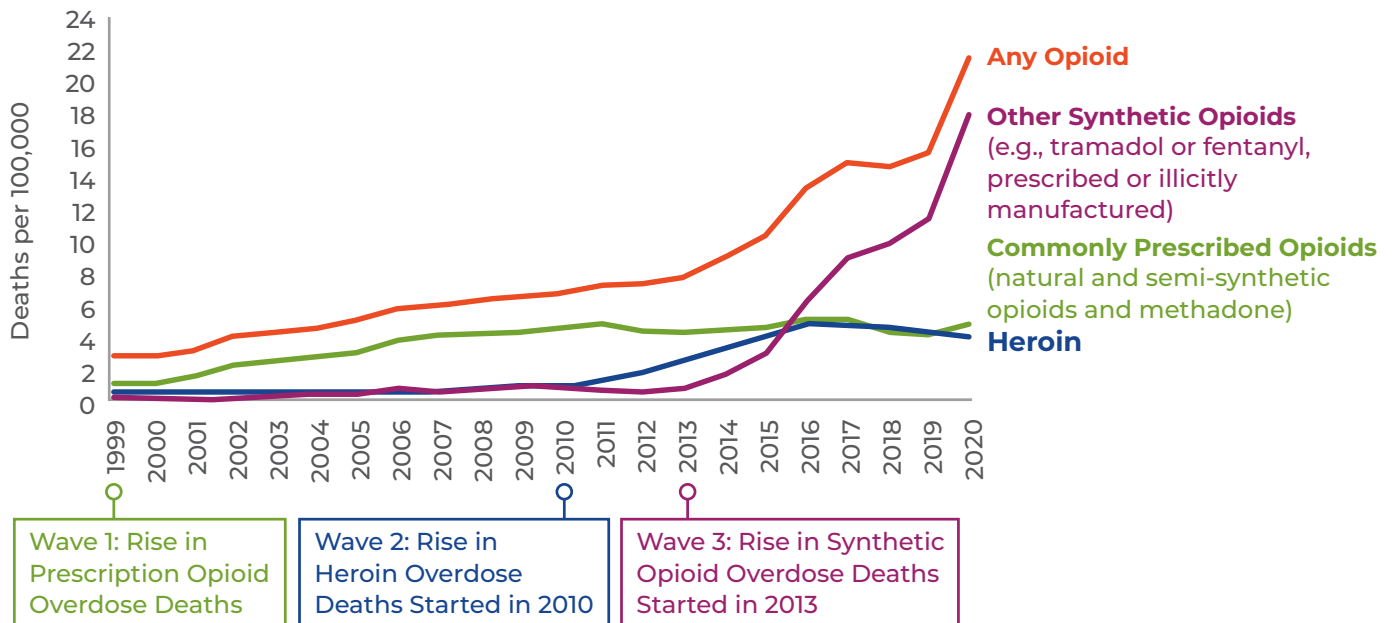


Note: Shading indicates fall in employment between 50 and 60 years of age.

Source: Berkman & Truesdale, 2023.

Reprinted from *The Journal of the Economics of Ageing*, 24, Berkman, L. F., & Truesdale, B. C., Working longer and population aging in the U.S.: Why delayed retirement isn't a practical solution for many, Copyright (2023), with permission from Elsevier.

Figure 13. Three Waves of Opioid Overdose Deaths, 1999–2020



Source: Centers for Disease Control and Prevention (2022).



Working Longer, If You Have a Job

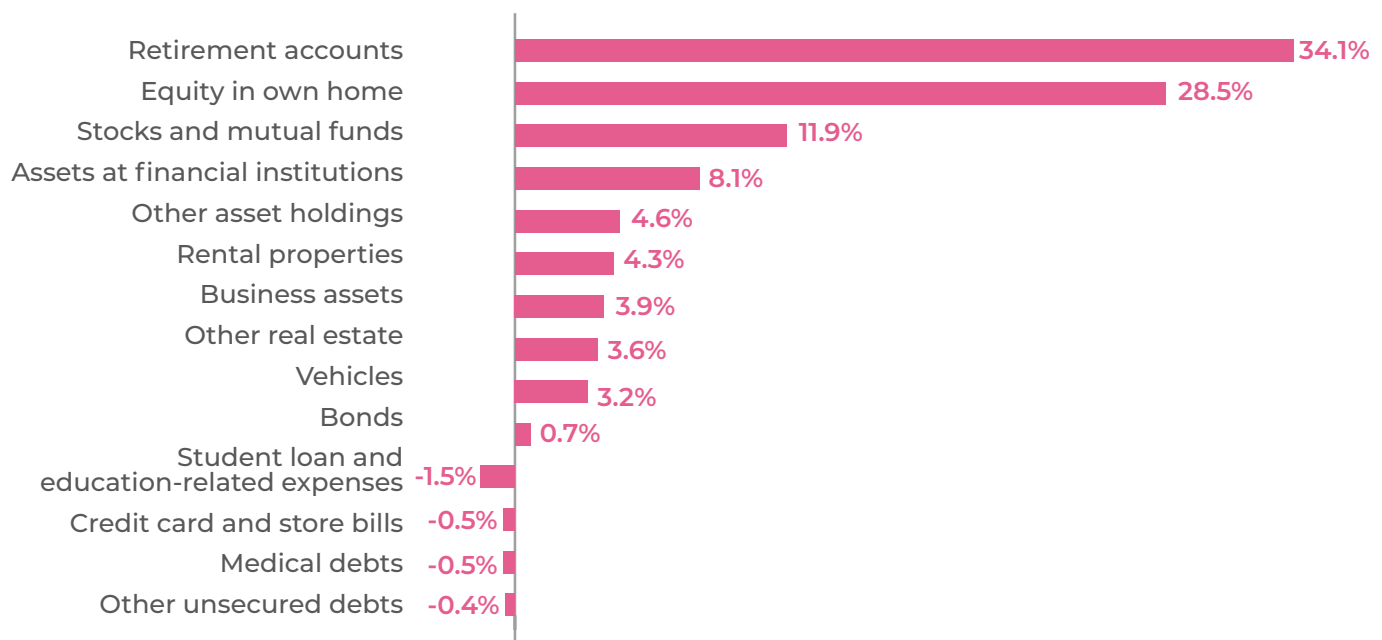
Not participating in the labor force is a reasonable option for people with the wealth they need for retirement. Does this explain the lower labor participation rates of people in their 40s and 50s?

Unfortunately, no. Only 60 percent of households have retirement accounts, and

62 percent have equity in their own home, according to the [U.S. Census Bureau's 2022 Survey of Income and Program Participation](#) (U.S. Census Bureau, 2023a). The median value of retirement accounts was \$79,000. As shown in Figures 7 and 14, wealth was held by those in the upper 3 quintiles of income, and about one-third

of wealth was retirement monies. Equity in homes was the second largest source of wealth, but this is not a liquid asset available to meet the expenses of daily life during middle adulthood (Hernández Kent, 2021; U.S. Census Bureau, 2023a).

Figure 14. Composition of Wealth Among American Households by Asset Types, 2021



Note: This figure excludes households in the top 1 percent of wealth because their holdings are not representative of other Americans.

Source: U.S. Census Bureau, 2023a.

The general assumption has been that people who lack sufficient retirement savings can make ends meet by working longer. This is already happening; a large percentage of the labor force today is aged 55 years or older. But is working longer—well into their 70s—feasible for the large numbers of workers who have no savings at age 55 or the many people who are not in the workforce in their 40s and 50s?

Truesdale et al. (2022) used Health and Retirement Study data to show that the likelihood of working longer rises with

employment stability in one's 50s. In other words, if you have a job, you have a better chance of working later in life. People steadily employed in their 50s have an 80 percent chance of working longer, compared with a 4 percent chance for those who were never employed during those years. Workers employed intermittently at low, medium, and high levels have respective chances of 18 percent, 42 percent, and 53 percent of being able to extend their working years (Truesdale et al., 2022).

Examples of efforts to help older adults find employment are AARP's [Employer Pledge Program](#) and its report showing that [age discrimination is costing the U.S. economy](#) \$850 billion each year. Such efforts can help people with skills and education who may have dropped out of the workforce for caregiving or health reasons. For people who have not worked for years, developing marketable skills in today's economy and convincing new employers of their abilities is difficult.



Tips for Employers

Addressing Menopause in the Workplace

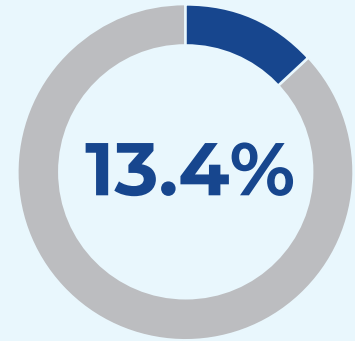
Although rarely discussed among employees, managers, and human resource professionals, menopause and its symptoms are experienced by most women who work during middle adulthood. Yet the stigma associated with menopause keeps many employees from speaking up about how symptoms of this condition have affected their work or about triggers in the workplace that worsen symptoms (Atkinson et al., 2021).

In a study of women receiving care at one of the four Mayo Clinic sites across the United States, 13.4 percent of 4,440 participants reported at least one adverse work outcome because of menopause symptoms, and 10.8 percent of women had missed work during the past year because of them (median of 3 days missed). The odds of reporting adverse work outcomes increased with the severity of the symptoms; women in the highest quartile of severity were 15.6 times more likely to report their situation than those in the lowest quartile (Faubion et al., 2023).

While the classic vasomotor symptoms of menopause can affect women's productivity, capacity

to work, and work experience, psychological and other somatic symptoms are thought to have a greater negative influence on work. Physical factors such as workplace temperature and design can have an effect on menopause symptoms, as can psychosocial factors such as work stress and perceptions of control and autonomy (Jack et al., 2016).

⚙️ Reducing the stigma of menopause and opening a conversation about its symptoms are the first steps employers can take to help those affected by this condition. Making medical and psychological support easily available and adapting the workplace to meet an individual's needs are important (Theis et al., 2023). In a survey of human resource professionals, recommended steps included talking about menopause openly and creating a culture of caring; offering manager training and education sessions; regularly engaging employees in a discussion of the topic and asking for feedback on the value of benefits being offered; creating an employee network or peer support group; and consulting with menopause professionals to review and enhance related programs and policies (Ipsos & Bank of America, 2023).

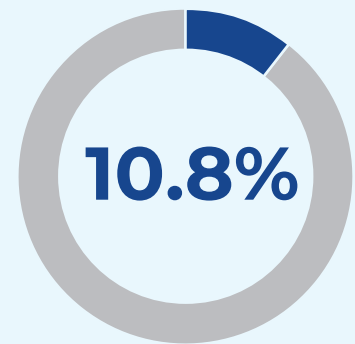


13.4%

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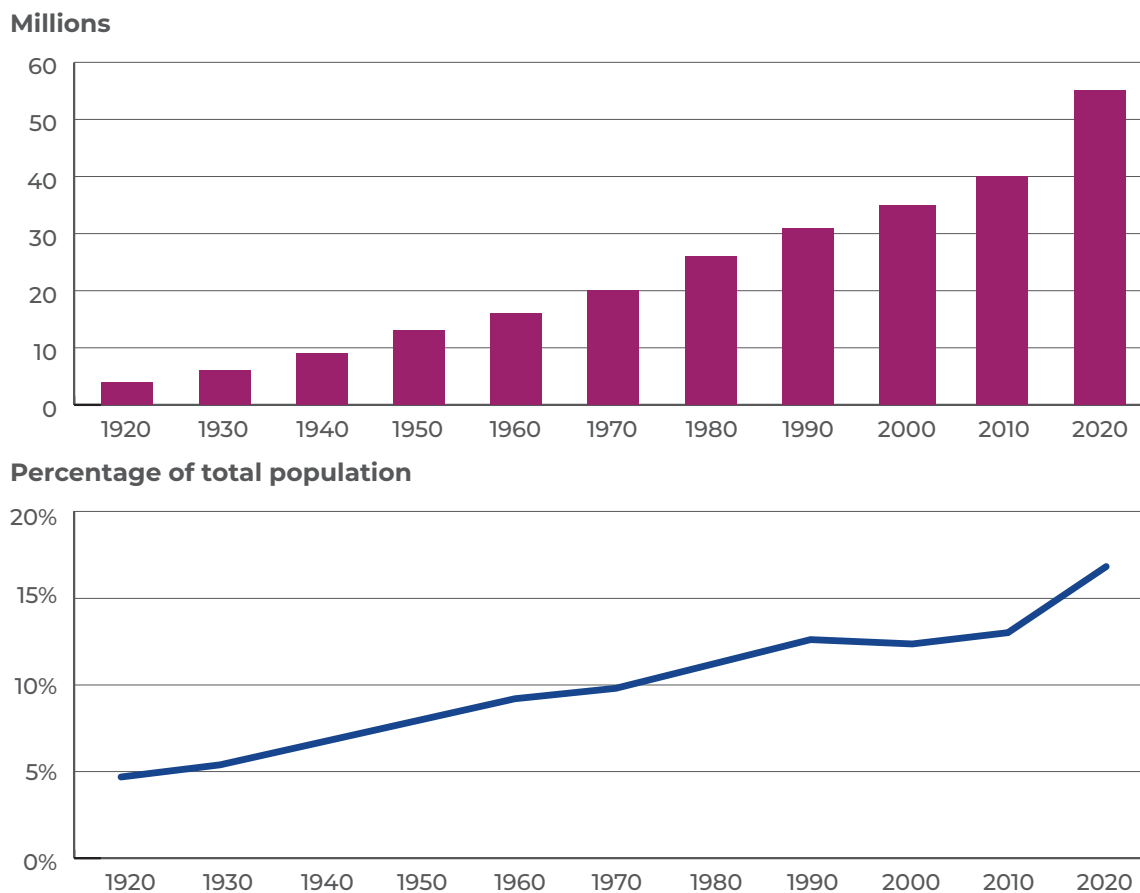


Older Adulthood:

When Retirement Is Not Planned Ahead

As the population of the United States shifts into older adulthood (Figure 15), three key factors are all affected by the cumulative advantages over a person's lifetime: wealth, health, and social connections. Wealth enables individuals to pursue their preferred lifestyle and increases their chances of living longer. Health makes them physically and mentally able to participate in their chosen activities. Social connections are needed for emotional health and assistance with practical needs such as rides to medical appointments or daily tasks if geriatric syndromes such as cognitive impairment or frailty affect a person's abilities.

Figure 15. U.S. Population Aged 65 Years and Older by Size and Percentage of Total Population, 2010–2020



Source: U.S. Census Bureau, 2023b.



Balancing Expenses With Retirement Monies

Retirement counselors use formulas and assumptions when clients ask whether they are “able to retire.” Actuarial assumptions about years of expected life remaining are factored into the calculation, along with increased health costs and the expenses of anticipated travel and leisure activities.

But is this what happens in later life? Mitchell et al. (2022) obtained data from several waves of the Health and Retirement Study to follow the original cohort (Figure 16). For these 9,600 people, initially ages 51 to 61 years in 1992 and who had aged to 75 to 85 years in 2016, patterns for each quartile emerged based on adjusted money income (e.g., labor earnings, pension benefits, Social Security benefits, disability and welfare benefits) at baseline.

People in quartile 1 were living at the poverty line at the beginning, and finances did not change appreciably for them as they aged—they stayed near the poverty line through 2016 (Figure 17). Groups more likely to be in this lowest income quartile were Black and Hispanic people, women, those with the least education, people with disabilities or children under age 18 in the home, nonworking persons, and residents of the American South. Much of the Social Security income for this group was claimed at age 62. By age 65, only about 20 percent of monthly income came from earnings. Social Security income largely replaced those earnings dollars. Since most of their later income came from Social Security and it changes annually with inflation, this quartile was not really on a “fixed income.” Pension and annuity income each accounted for about 20 percent of income for this quartile (Mitchell et al., 2022).

Individuals in quartile 2 had the most favorable outcomes in terms of adjusted money income. Members of this second income quartile more often continued

working into their 70s in lower-paying jobs. As shown in Figure 17, the result was a fairly even trade between work income and Social Security at a higher amount than in quartile 1, and some people had capital income plus supplementary income from pensions and annuities. By age 82, annual income in this group increased by about 10 percent over baseline; in all other quartiles, income at age 82 was lower by 10 percent or more (Mitchell et al., 2022).

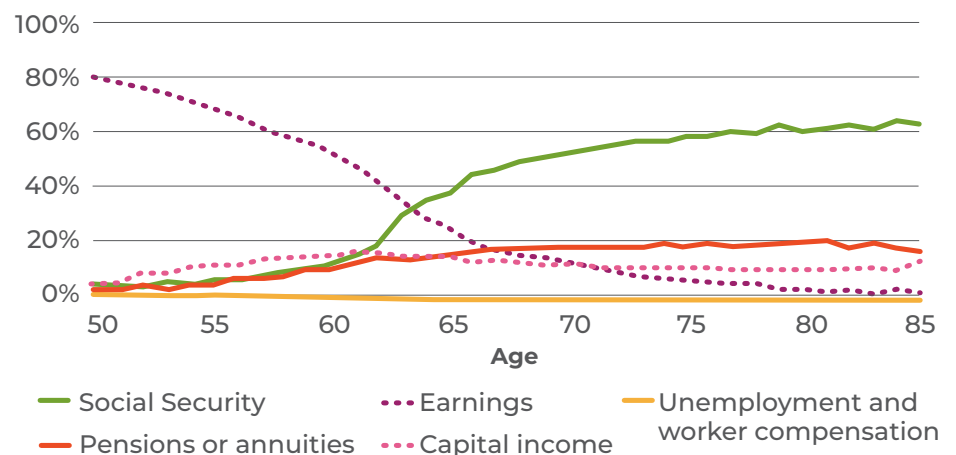
Quartiles 3 and 4 experienced real declines in total income. They retired earlier than people in quartile 2, and Social Security made up a smaller percentage of their total income and was not able to compensate for declines in other income streams. Quartile 3—the upper middle class—was particularly affected, with money income about 35 percent lower at age 82 than at baseline (Mitchell et al., 2022).

While income for people in quartile 4 declined, many of them had an increase in household wealth during retirement.

Wealth income included fixed assets that are not liquid such as homes, real estate investments, and other possessions that cannot be easily converted to cash. Had this wealth been annuitized, their full annual income could have risen substantially (Mitchell et al., 2022).

These statistics paint a picture of many people being forced to make difficult decisions about what they can afford in older adulthood. Safety nets help people in the lower quartiles, and those who are able to work longer may also have had insurance for health, dental, and vision until Medicare coverage begins at age 65 years as well as other benefits such as long-term care and disability insurance. People with more income would not qualify for safety-net programs, leaving them to decide what to prioritize as their income declines. Those in the highest quartile had the option of converting fixed assets into cash or using them to produce more income.

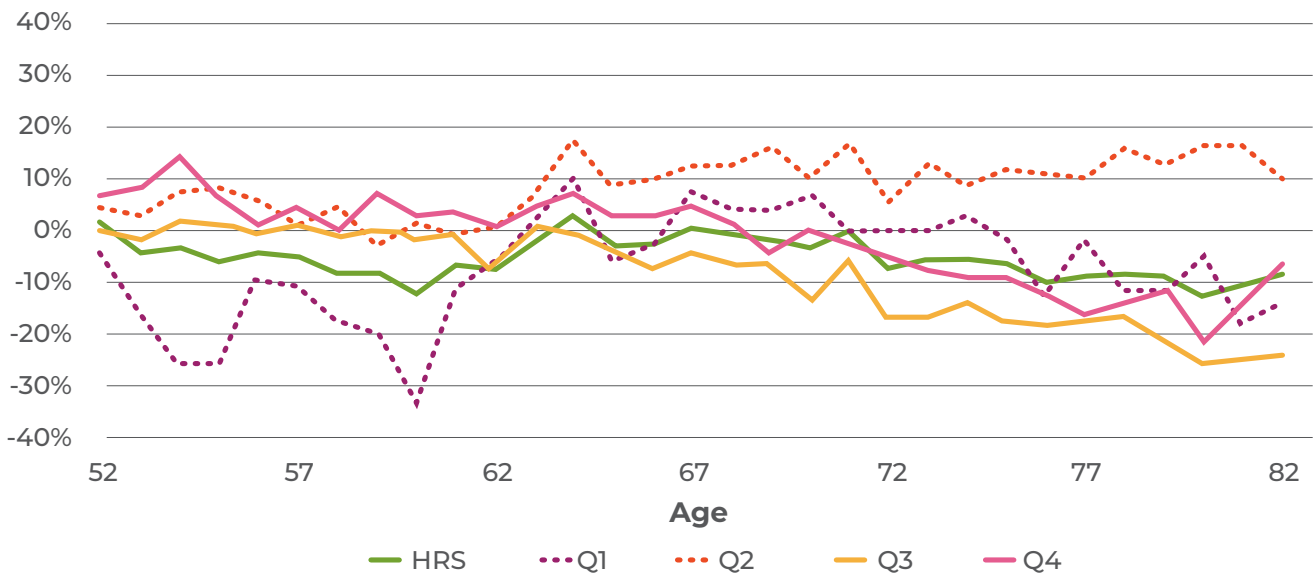
Figure 16. Sources of Income for Individuals in the Original Cohort of the Health and Retirement Study



Source: Mitchell et al., 2022.

Originally published as “Shares of Adjusted Money Income by Age: Total and by Quartile. A. Original HRS, Total” from Mitchell et al. (2022) (CC BY-NC-ND 4.0). Used with permission under Creative Commons.

Figure 17. Percentage Changes in Adjusted Money Income by Age in the Original Health and Retirement Study Cohort by Quartiles of Baseline Adjusted Money Income



Note: In 2019 dollars.

Abbreviations: HRS, Health and Retirement Study; Q, quartile.

Source: Mitchell et al., 2022.

Originally published as “Percentage Changes in Adjusted Money Income by Age in the Panel and Quartile of Baseline Adjusted Money Income Quartile: Original HRS at Baseline Followed Over Time (in \$2019)” from Mitchell et al. (2022) (CC BY-NC-ND 4.0). Used with permission under Creative Commons.



Healthy Longevity Across an Expanding Lifespan: Work Capacity, Disease Trends, and Social Capital

Health in older adulthood is a function of cumulative experiences and influences of the social determinants in older adulthood: where a person has lived and what chronic diseases or acute conditions they have experienced; the safety and quality of their food, air, and water; accessibility of quality food and health care services; their working conditions and lifestyle factors; and the strength of a supportive, nondiscriminatory community. Those who have lived

with advantages are likely to see those multiplied in older adulthood; those with disadvantages are more likely to have multimorbidities and to die at earlier ages.

When people reach older adulthood with prospects of many more years of life, those with better health often would like to (or need to) continue working in their lifelong occupations or professions, rejoin the workforce, shift to consulting, begin an encore career with a new employer, or transition into second careers in other

fields. People who do not need or want to work for pay can benefit by serving in volunteer roles that match their knowledge and interests. Whether people are able to fulfill these needs and dreams is determined by a variety of health-related abilities—cognition, psychomotor, physical, and sensory—that collectively determine a person’s work capacity for specific jobs and roles (Berger et al., 2022).

Of the 52 specific abilities associated with higher maximum potential earnings,



several are in the cognitive category: problem sensitivity, inductive reasoning, memorization, and selective attention. Control precision is a similarly important ability in the psychomotor category, and near vision, speech recognition, and speech clarity are keys to higher income in the sensory category. None of the abilities in the physical category are associated with higher maximum potential earnings (Berger et al., 2022).

People currently in older adulthood self-report confidence in abilities needed in well-paying jobs. Combining data from the American Work Capacity and Abilities Survey (Lopez Garcia et al., 2019) and the Occupational Information Network (O*NET), Berger et al. (2022) showed that men report higher ability levels than women, college graduates higher levels than nongraduates, and younger age cohorts slightly higher ability levels than those in older age cohorts. Mean ability levels are similar for White and Black people, with Black people reporting a broader spread of abilities at the high or low levels.

In addition to a person's work capacity, general health is an important factor across the lifespan and an important concern in older adulthood. As trends toward more years of expected life have taken the world toward an aged population, researchers are seeking

to expand the years of healthy life, a concept labeled the *healthspan*. During the expanded years of life, older adults are finding they can take on a variety of roles while healthy, including working for pay, volunteering in their areas of interest or knowledge, participating in sports and other activities, or traveling. When older adults stay in the workforce, they can help address ageism by proving to their colleagues that they maintain their cognition and competency.

As described in the previous section on Middle Adulthood, a number of concerning health patterns portend problems in the future. Crimmins et al. (2019) used nationally representative Health and Retirement Study data for two older and two younger cohorts (ages 70 to 90 years, born in 1913 to 1923 and 1924 to 1934; and ages 51 to 71 years, born 1931 to 1941 and 1943 to 1954) to illustrate the importance of looking at three parameters: incidence and prevalence of health conditions and the associated mortality. In the study, incidence counted people when they first reported a disease; once they have reported a disease, people are counted in all future years in the prevalence figure; and mortality measures death rates among people with a disease.

Cancer, diabetes, and stroke were increased in prevalence across the four

cohorts but for different reasons. Cancer incidence was approximately the same across the age groups, but fewer younger people died, resulting in increased prevalence. More people developed diabetes as a result of obesity and sedentary lifestyles, while better diagnosis and treatment decreased mortality and thereby increased overall prevalence. Stroke was even more complicated, with decreases in both incidence and mortality leading to a net overall increased prevalence among the older cohorts. Among the older cohorts, the incidence of heart disease, myocardial infarction, and stroke decreased, but only myocardial infarction had a lower incidence in the younger cohorts (Crimmins et al., 2019).

Taken together, these trends point toward an aging population with more physical infirmities that can affect their work capacity, lifestyle, and quality of life. With drug use, suicides, obesity, and diabetes on the increase in the current middle-aged population, people are both more likely to die early or if they live, to enter older adulthood with multiple chronic conditions and less ability to join or stay in the workforce or to maintain their activities of daily living as they age (Shirazi et al., 2023).

When decline comes, social connections magnify in importance. Not only do people live longer when they have social ties with friends, neighbors, relatives, and work colleagues, they often need help with tasks at home and transportation to food stores, pharmacies, and medical appointments.

The COVID-19 pandemic led some older adults, particularly those with at-risk conditions such as diabetes or respiratory disorders, to retreat into their homes. Behavioral health has suffered as a result, with indications of increased use of alcohol and a greater prevalence of depression, anxiety, and loneliness. While some indicators point to fewer adverse effects on older adults during the pandemic than in previous disasters, the uneven distribution of these problems makes them harder to identify and more difficult to address (Parks et al., 2023).



Tips for Employers

The Retirement Decision Is Complicated

The generations of workers currently in the workforce have faced many challenges over the past 50 years: recessions and inflationary periods, economic bubbles bursting in the housing and technology markets, automation of many blue-collar jobs, the worst pandemic in a century, and now the emergence of artificial intelligence as a threat to white-collar and intellect-based work. All workers—but especially those approaching retirement—need to recognize how often economic difficulties have occurred and their impact on financial health and retirement savings.


Unemployment, layoffs, and voluntary job changes have likely affected workers' ability to save money for retirement throughout

their careers. In the United States, people born between 1957 and 1964 held an average of 12.4 jobs between ages 18 to 54, which averages out to a new job every 2.9 years. This cohort experienced an average of 5.8 periods of unemployment over those 36 years, each with a possible change in retirement savings options and the temporary loss of health insurance and other benefits. Unemployment affected 31.6 percent of high school dropouts 10 or more times, compared with 24.8 percent, 20.1 percent, and 7.2 percent of high school, trade school/some college, and college graduates, respectively (Bureau of Labor Statistics, 2023).

The decision to retire goes beyond retirement savings. Health, disability, life, and dental insurance are expensive to employers and even more costly when individuals try to obtain coverage on their own. People retiring before age 65 need to be well informed about these costs before they make the leap and the lost income when they claim **Social**

Security benefits early (before their full retirement age or a delayed age up to 70 years old).

Some people want to continue working until 65 just to keep their benefits. If middle-aged or older workers become unemployed, finding a new suitable position is difficult because of working conditions, family caregiving responsibilities, poor health, and age discrimination (Berkman et al., 2022; Crimmins et al., 2019).

 Employers should provide workers with information on their benefits and how important those are to their lives and those of their families. As part of retirement planning education, be sure to cover what benefits employees can take with them and at what out-of-pocket costs. Work with employees of all ages to focus on retirement planning long before they plan to use it.



Conclusion

Social determinants of health can present challenges to people, affect someone's life trajectory, and interact with each other to multiply advantages and disadvantages. As demonstrated in this report, some determinants are important regardless of life phase, while others are more dominant in some phases than others. Employers can improve the quality of life of employees, their families, and the community by focusing on the effects of economic stability, education access and quality, health care access and quality, neighborhood and the built environment, and social and community context across the life course.



Access to quality, affordable health care services is a pivotal SDOH. Its importance is magnified during the developmental years of early childhood and as people age into middle and older adulthood.

For employers, a health-related tip is to look at the impact of the work activities and products of the company and business on individual employees and the communities in which they operate. Addressing these commercial determinants of health can be important in maintaining good relations with employees, vendors, customers, and the communities where the businesses operate, their products are used, and their services are delivered. Another health-related tip is to reduce the stigma of menopause and open a conversation about its symptoms and how they affect employees in the workplace.



“Neighborhood” has become shorthand for the conditions under which people are born, grow, live, and age. Because of the economic and historical patterns of where people live, several SDOH are influenced by geographic location, including the quality of housing, safe places to walk and exercise, and the availability of nutritious foods and pharmacies within a distance reachable with the available transportation options. These conditions affect many aspects of life, and they ultimately can become key factors in a person's health and years of life.

Employers can create healthy environments for workers by having smoke-free workplaces, fitness opportunities, lactation rooms, access to healthy foods, and standards for reducing psychological stress. Employees working remotely benefit from support for gym memberships, mental health services, and transportation supplements for those living in food or health care deserts.




This report showed how economic stability is important across the lifespan. Income and wealth come into play in each phase of life for different reasons. In early childhood, money is required to support the basic necessities a young child needs and to afford a quality early education. Later in life, funds are needed for college, housing and transportation, marriage and having children, childcare, health care services, and retirement.

Employers can help employees who live in the large number of American households in the ALICE category, namely those who are asset limited, income constrained, and employed. About one-third of households are in the ALICE category, another 13 percent of households are under the federal poverty level. In 2021, 52.5 million households were in one of these categories. The ALICE project operates through local United Way organizations, which receive substantial support from companies through payroll deductions. Employers can help ALICE families by making payroll deductions available to support the United Way, making sure an ALICE program is operating in their communities, and helping to start a program where one is lacking.




Access to quality education is critical during those parts of life when learning and school occupy most of the waking hours. Early education and support for childhood development put a young person on the best possible trajectory. As children move into middle school and adolescence, they begin to track toward colleges, trade schools, or work following high school. In young adulthood, work replaces education as the dominant activity, and the type of work dictates earnings potential and career possibilities. Major decisions about partnerships, marriage, and children have an enormous impact on many aspects of life.

 Employers can use the Neighborhood Atlas to understand the everyday challenges their workers face. Disadvantaged neighborhoods are more likely to have schools that get less volunteer and financial support from parents working multiple jobs and are not able to attract the best teachers. By combining employee maps with knowledge of the surrounding geographic area, benefits managers can better design flexible benefits that meet the needs of employees living in different parts of a city or town or in rural areas. One of these needs could be support for quality education of employees' young children or financial contributions to activities at schools in disadvantaged neighborhoods.



Social and community context can manifest in many ways throughout life, from the structural conflict that threatens a person's safety to the long-term effects of discrimination on health. Social inclusion can expand or limit the group of potential friends for children and adolescents, life partners for young adults, and support for older adults as their daily activities become compromised.

 In older adulthood, social connections are as important as retirement savings and overall health. In addition to savings and access to affordable quality health care during retirement, businesses can educate employees about the importance of staying active and maintaining friendships during retirement.



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