



# **Using the Social Determinants of Health to improve healthcare delivery in school**

Presented by Laurie Fleming, RN, MPH, NCSN



# agenda

What are the Social  
Determinants of Health?

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How are the SDOH used to  
inform health practice and  
policies?

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Healthy People 2030

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Evidence-based Resources

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How can we use this  
information to inform our  
practice?

# What are the social determinants of health?

Social Determinants of Health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.



# Why are the Social Determinants of Health Important?

- Healthy People 2030 sets the strategic agenda for public health improvements in the United States between 2020-2030.
- There are 3 priority areas for Healthy People 2030. The Social Determinants of Health is one of the areas.
- Healthy People has national objectives for each of the 5 domains of the SDOH.

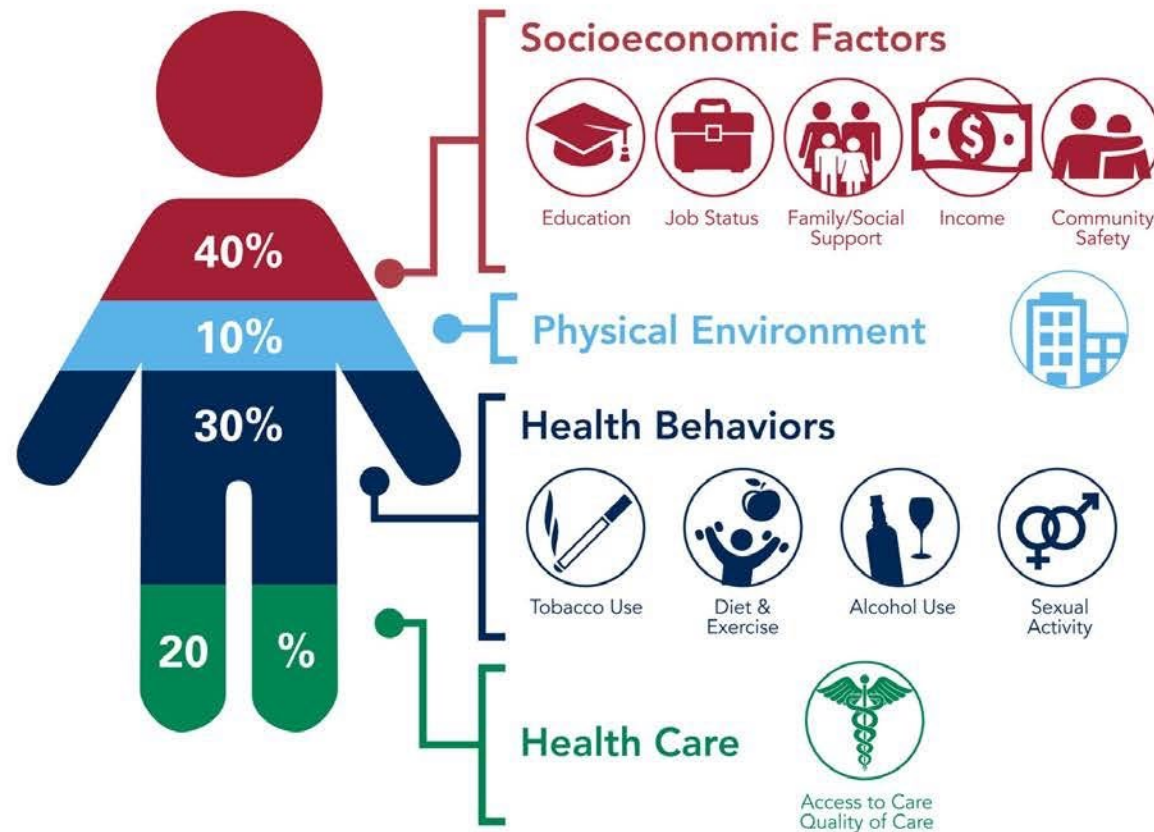


# Why should School Nurses care about the Social Determinants?



- Nurses have a long history of focusing on the interaction between the patient, environment, and health
- School Nurses have relationships with children and families
- School Nurses are often the only healthcare some students get because they face barriers to accessing the healthcare system
- School Nurses are student advocates
- School Nurses follow a code of ethics

# Health Outcomes



## SDoH Impact

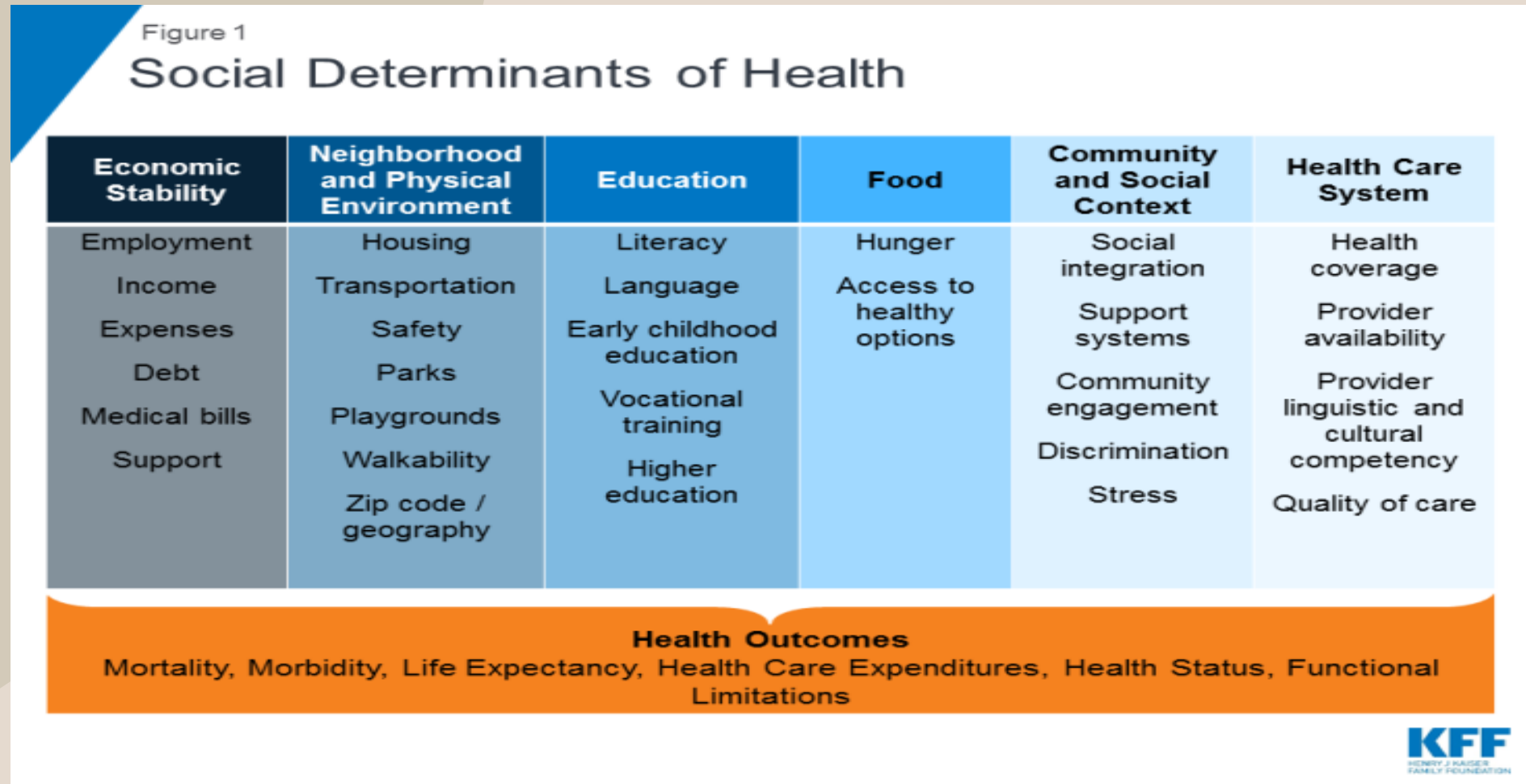
- ➔ **20%** of a person's health and well-being is related to **access to care** and **quality of services**
- ➔ The **physical environment**, **social determinants** and **behavioral factors** drive **80%** of health outcomes

# 5 Domains of the Social Determinants of Health



- ☐ Education Access and Quality
- ☐ Health Care and Quality
- ☐ Neighborhood and Built Environment
- ☐ Social and Community Context
- ☐ Economic Stability

# What are we measuring with the SDOH?



# Education

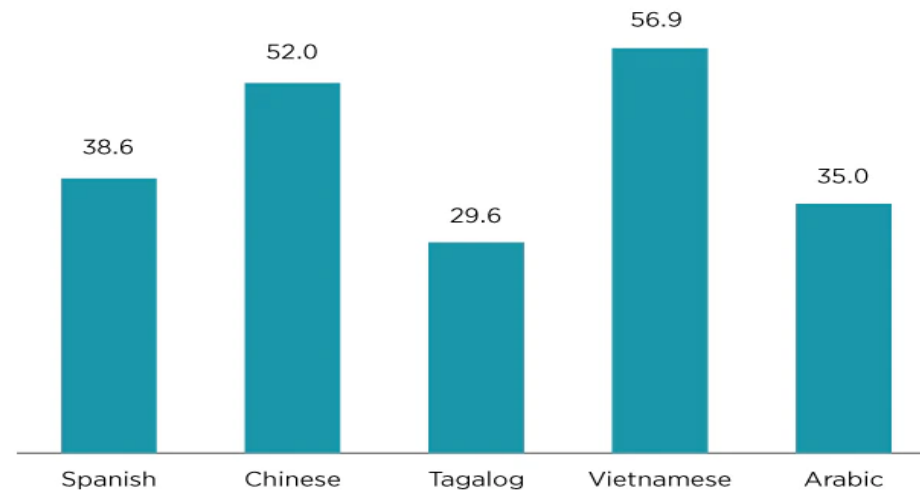


- Language and Literacy
- Educational Attainment
- Early Childhood Development
- Quality of Local Schools

# English Language Literacy

- 1 in 5 speak a language other than English at home.
- Most common are Spanish, Chinese, Vietnamese, Tagalog, and Arabic.

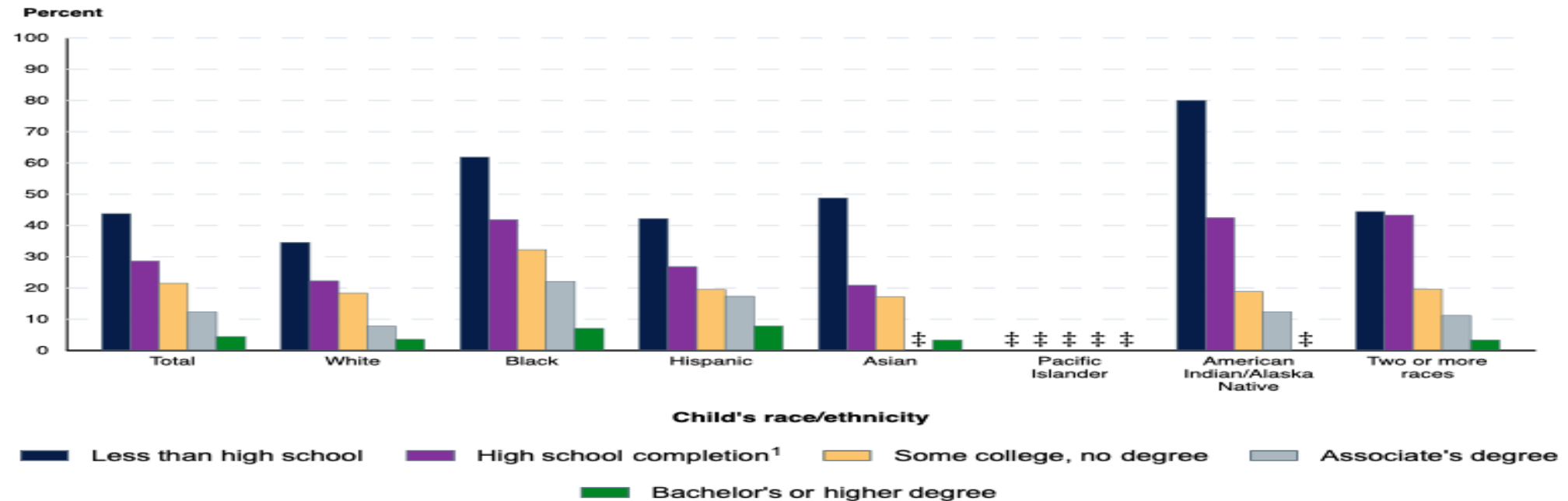
Figure 4.  
**Most Frequently Spoken Languages at Home by English-Speaking Ability: 2019**  
(In percent)



Source: U.S. Census Bureau, 2019 American Community Survey, 1-year estimates.

# Parents without a high school education and poverty 2020

**Figure 5. Percentage of children under age 18 in families living in poverty, by child's race/ethnicity and parents' highest level of educational attainment: 2020**



† Not applicable.

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

<sup>1</sup> Includes parents who completed high school through equivalency programs, such as a GED program.

NOTE: Data are based on sample surveys of the noninstitutionalized population, but this figure includes only related children under age 18 who resided with at least one of their parents (including an adoptive or stepparent, but excluding parents not residing in the same household). Parents' highest level of educational attainment is the highest level of education attained by any parent residing in the same household as the child. The measure of child poverty includes children who are related to the householder by birth, marriage, or adoption (except a child who is the spouse of the householder). The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. Poverty status is determined by the Census Bureau using a set of money income thresholds that vary by family size and composition. For additional information about poverty status, see <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>. Race categories exclude persons of Hispanic ethnicity. Although rounded numbers are displayed, the figures are based on unrounded data.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), Annual Social and Economic Supplement, 2021. See *Digest of Education Statistics 2021*, table 102.62.

# Healthcare & Quality

- Access to Primary, Specialty and Emergency Care
- Affordability
- Health Literacy
- Quality of Care
- Insurance Coverage



# Health Insurance coverage



- According to the US Census Bureau, 8.3% of people or 27.2 million people had no health insurance at any point in 2021.
- 5% of children under age 19 were uninsured in 2021. This was a decrease due to Medicaid (COVID coverage still active)

## Health Literacy affects more than just those who can't read

- **Personal health literacy** is the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.
- **Organizational health literacy** is the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.

**BE A HEALTH LITERACY HERO**

Nine out of 10 adults struggle to understand and use health information when it is:

- Unfamiliar
- Complex
- Jargon-filled

Limited health literacy costs the health care system money and results in higher-than-necessary morbidity and mortality.

You can improve health literacy by:

- Using plain language
- Simplifying numbers
- Accounting for culture

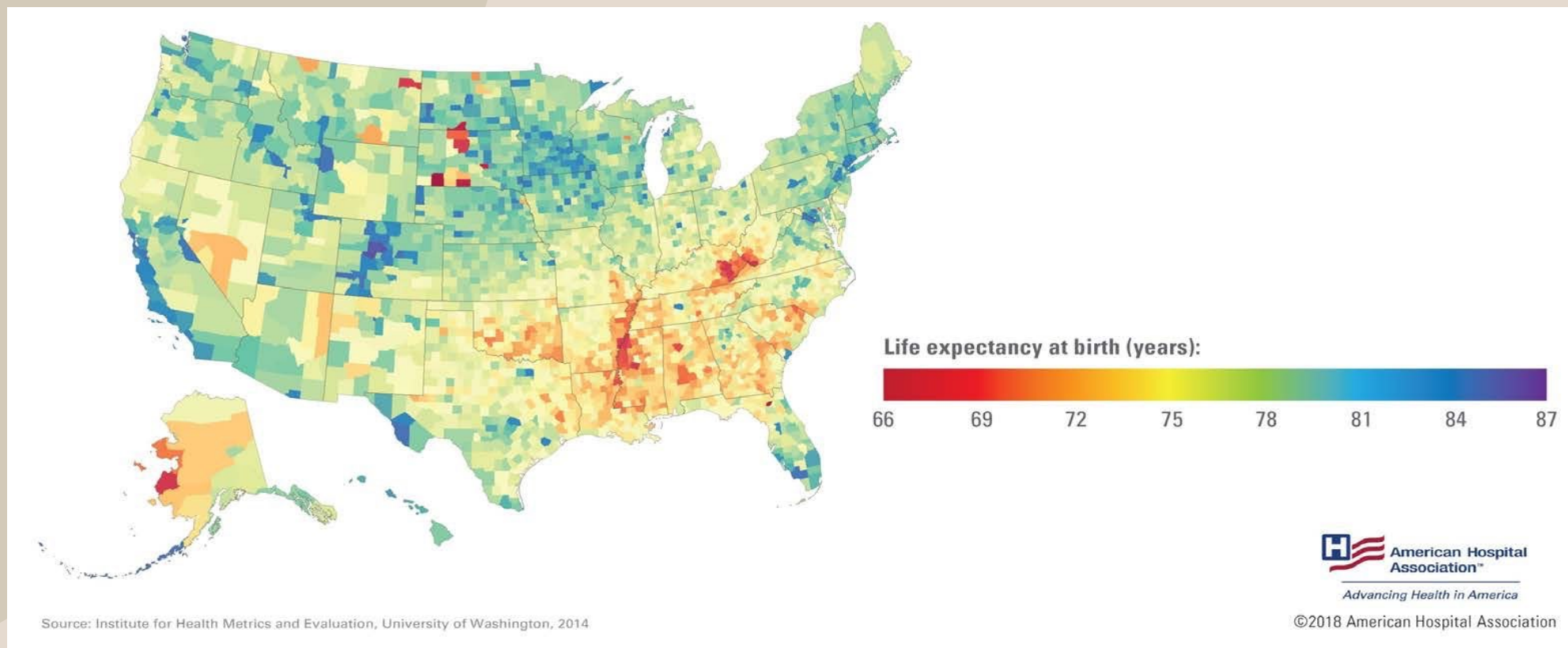
Source: Centers for Disease Control and Prevention, 2016

# Neighborhood and Built Environment



- Quality of Housing
- Food Access
- Violence
- Crime/Public Safety
- Environment (clean water and air)
- Healthy Workplaces
- Schools and Transportation

# Life Expectancy-National Rates



# Hunger and Poverty in the US 2019

**23.8%** of children live  
**below the poverty line**

**22 Million**  
children rely on the **free or**  
**reduced price** lunch meals  
from school for food

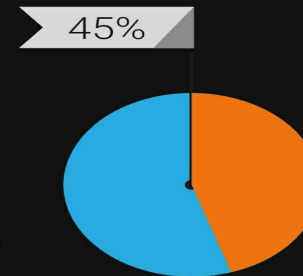
## Hunger in American Children

**6 out of 7**

hungry children eat less during  
the summer because they're no  
longer getting school lunches



**45% of food  
stamp users  
are children**



## Violence causes Adverse Childhood Effects

Nearly  
**25,000**  
lives lost to  
homicide in 2020

- **ACEs are common.** About 61% of adults surveyed across 25 states reported they had experienced at least one type of ACE before age 18, and nearly 1 in 6 reported they had experienced four or more types of ACEs.
- **Preventing ACEs could potentially reduce many health conditions.** For example, by preventing ACEs, up to 1.9 million heart disease cases and 21 million depression cases could have been potentially avoided.
- **Some children are at greater risk than others.** Women and several racial/ethnic minority groups were at greater risk for experiencing four or more types of ACEs.
- **ACEs are costly.** The economic and social costs to families, communities, and society totals hundreds of billions of dollars each year. A 10% reduction in ACEs in North America could equate to an annual savings of \$56 billion.

# Social and Community Context

- Social Support
- Social Cohesion
- Civic Engagement
- Faith-based Communities
- Incarceration



# Economic Stability

- Food Security
- Housing
- Employment
- Income/Poverty Level



# Children and Poverty in NH

Location	Poverty Level	Data Type	2016	2017	2018	2019	2020	2021
New Hampshire	Children in Poverty	Number	28,829.0	25,993.0	26,189.0	23,451.0	23,655.0	23,655.0
	Children in Poverty	Percent	11.0%	10.0%	10.2%	9.2%	9.3%	9.3%

# Children in NH without a vehicle at home

Location	Data Type	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021
New Hampshire	Number	5,000	8,000	7,000	9,000	7,000	7,000	6,000	7,000	4,000	5,000
	Percent	2%	3%	2%	3%	3%	3%	2%	3%	2%	2%



# Grandparents raising grandchildren in NH

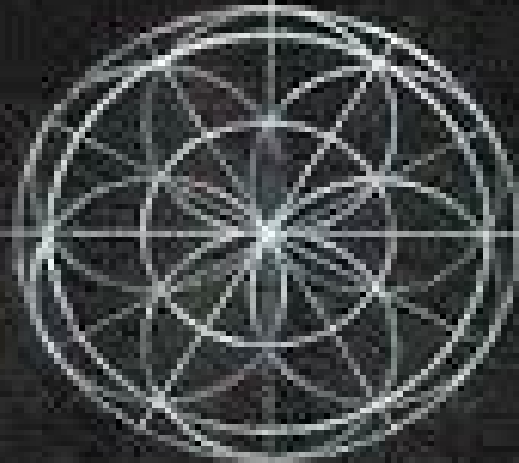
Location	Grandparent Caregivers	Data Type	2016	2017	2018	2019	2020	2021
New Hampshire	Total Over Age 30 Population	Number	853,692.0	860,478.0	870,217.0	876,893.0	885,755.0	901,054.0
	Grandparents living with own grandchildren	Number	21,591.0	22,765.0	23,092.0	23,478.0	23,113.0	23,166.0
	Grandparents responsible for own grandchildren	Number	7,189.0	7,675.0	7,470.0	7,416.0	6,907.0	6,224.
	Responsible less than 6 months	Number	878.0	886.0	724.0	621.0	697.0	664.0
	Responsible 6 to 11 months	Number	727.0	821.0	843.0	788.0	641.0	500.0
	Responsible 1 or 2 years	Number	1,842.0	1,734.0	1,493.0	1,519.0	1,411.0	1,198.0
	Responsible 3 or 4 years	Number	980.0	1,111.0	1,322.0	1,336.0	1,336.0	1,400.0
	Responsible 5 years or more	Number	2,762.0	3,123.0	3,088.0	3,152.0	2,822.0	2,462.0



RESOURCE TO GET NH DATA

THE ANNIE E. CASEY FOUNDATION

**KIDS COUNT DATA CENTER**



**"Learn how to see. Realize that everything connects to everything else."**

**Leonardo da Vinci**

The background features a light gray base with large, soft-edged organic shapes in muted red and olive green. A thin white line outlines a shape on the right. In the top left, there is a faint sketch of a leafy branch.

group activity

The background features a light gray base with large, soft-edged organic shapes in muted red and olive green. A thin white line outlines a shape on the right side. In the top left, there is a faint, light gray sketch of a leafy branch.

# Focus Upstream

Upstream Thinking

# DOWNSTREAM VS. UPSTREAM THINKING

## DOWNSTREAM THINKING

- Does not remove causes or stop them from happening
- Examples: Treating an illness, screenings

## MIDSTREAM THINKING

- We attempt to change the causes of illness
- Examples: improving working and living conditions, promotion of healthy behaviors
- Happens at the local, community, and organizational levels

## UPSTREAM THINKING

- We create positive environments that affect midstream and downstream conditions and interventions
- Affect the “causes of the causes”
- Examples- Safe Neighborhoods Initiative, Health Promoting Schools, Walkable Communities Initiative, and Housing for Health Programs.

# Moving Upstream



# Healthy People 2020 in Review: Healthy People Objectives by the Numbers

Making progress toward **Healthy People objectives** — and meeting our targets — helps improve health and well-being for people nationwide!

## Success in Healthy People 2020

Healthy People 2020 featured **1,111** measurable objectives. **985** of those were trackable because they had:

- Baseline data
- At least 1 additional data point collected during the decade
- A target

As a nation, by the end of the decade we:

Met or exceeded the targets for  
**✓ 34%**  
of trackable objectives

Made progress towards  
**+ 21%**  
of trackable objectives

## Streamlining Healthy People 2030

With fewer objectives and higher data standards, Healthy People 2030 is more focused and rigorous than previous iterations of the Healthy People initiative:



# 3 Areas Addressed for Each Domain

## CORE OBJECTIVES

- Statistical source identified
- Data after 2015 that represents the whole US
- Probability of identifying at least 2 more data points in by Healthy People 2040
- There is sufficient baseline data
- There are timelines for implementation

## DEVELOPMENTAL OBJECTIVES

- Evidence –based interventions that have been identified to address gaps
- Insufficient baseline data available
- Difficult to measure changes effectively

## RESEARCH PRIORITIES

- More research is required to identify and assess evidence-based intervention that can be used to improve the health and well-being of students

# Education Access and Quality Core Objectives

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graph LR; A[Education Access and Quality Core Objectives] --- B[INCREASE THE PROPORTION OF STUDENTS WITH DISABILITIES WHO ARE USUALLY IN REGULAR EDUCATION PROGRAMS]; A --- C[INCREASE THE PROPORTION OF HIGH SCHOOL STUDENTS WHO GRADUATE IN 4 YEARS]; A --- D[INCREASE THE PROPORTION OF 4TH GRADE STUDENTS WITH MATH SKILLS AT OR ABOVE THE PROFICIENT LEVEL]; A --- E[INCREASE THE PROPORTION OF 4TH GRADE STUDENTS WITH READING SKILLS AT OR ABOVE THE PROFICIENT LEVEL]; A --- F[INCREASE THE PROPORTION OF HIGH SCHOOL GRADUATES IN COLLEGE BY OCTOBER AFTER GRADUATION];
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INCREASE THE PROPORTION  
OF HIGH SCHOOL  
STUDENTS WHO GRADUATE  
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OF 4<sup>TH</sup> GRADE STUDENTS  
WITH READING SKILLS AT  
OR ABOVE THE PROFICIENT  
LEVEL

## **Increase the proportion of high school students who graduate in 4 years — AH-08**

Recent Data:  
85.8 percent (2018-19)

Target:  
90.7 percent

Desired Direction:  
Increase desired

Baseline:  
84.1 percent of students attending public schools graduated with a regular diploma  
4 years after starting 9th grade in school year 2015-16

**Status: Improving**



# Examples of Other Healthy People 2030 Objectives

- Increase the proportion of schools with policies and practices that promote health and safety
- Reduce the proportion of students in grades 9 through 12 who report sunburn
- Reduce chronic school absence among early adolescents
- Increase the proportion of trauma-informed early childcare settings and elementary and secondary schools
- Increase the proportion of children and adolescents with ADHD who get appropriate treatment

# Examples on how to search for topics or specific populations

health.gov

Access Portal

Browse Objectives - Healthy People 2030 | health.gov


## Browse Objectives

Healthy People 2030 objectives are organized into intuitive topics so you can easily find the information and data you're looking for. Pick a topic you're interested in and explore the relevant objectives.


On this page: [Health Conditions](#) | [Health Behaviors](#) | [Populations](#) | [Settings and Systems](#) | [Social Determinants of Health](#)

### Health Conditions

<a href="#">Addiction</a>	<a href="#">Heart Disease and Stroke</a>
<a href="#">Arthritis</a>	<a href="#">Infectious Disease</a>
<a href="#">Blood Disorders</a>	<a href="#">Mental Health and Mental Disorders</a>
<a href="#">Cancer</a>	<a href="#">Oral Conditions</a>
<a href="#">Chronic Kidney Disease</a>	<a href="#">Osteoporosis</a>
<a href="#">Chronic Pain</a>	<a href="#">Overweight and Obesity</a>
<a href="#">Dementias</a>	<a href="#">Pregnancy and Childbirth</a>
<a href="#">Diabetes</a>	<a href="#">Respiratory Disease</a>
<a href="#">Foodborne Illness</a>	<a href="#">Sensory or Communication Disorders</a>
<a href="#">Health Care-Associated Infections</a>	<a href="#">Sexually Transmitted Infections</a>



### Health Behaviors




health.gov

Access Portal

Browse Objectives - Healthy People 2030 | health.gov


## Populations

<a href="#">Adolescents</a>	<a href="#">Older Adults</a>
<a href="#">Children</a>	<a href="#">Parents or Caregivers</a>
<a href="#">Infants</a>	<a href="#">People with Disabilities</a>
<a href="#">LGBT</a>	<a href="#">Women</a>
<a href="#">Men</a>	<a href="#">Workforce</a>




## Settings and Systems

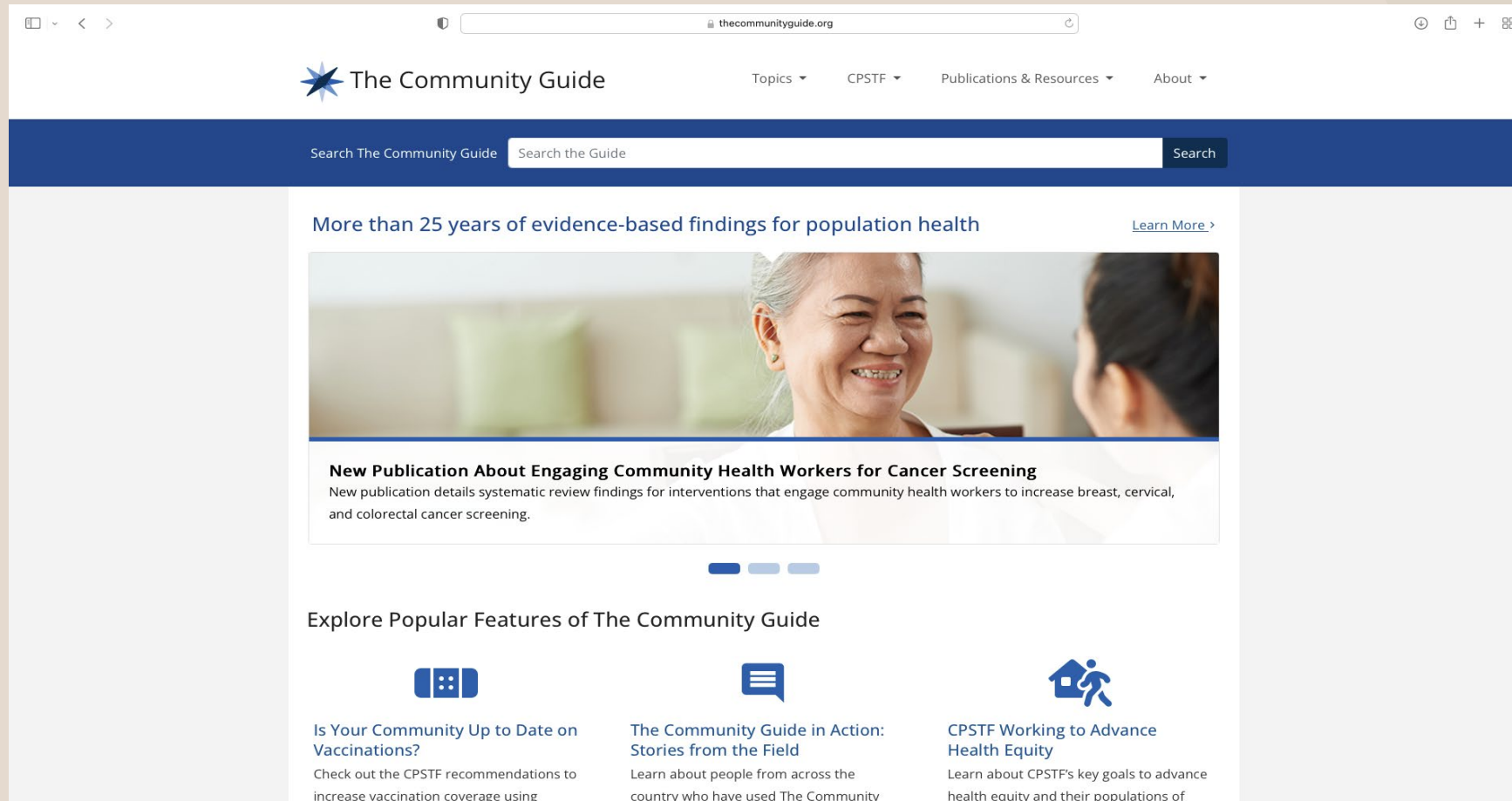
<a href="#">Community</a>	<a href="#">Hospital and Emergency Services</a>
<a href="#">Environmental Health</a>	<a href="#">Housing and Homes</a>
<a href="#">Global Health</a>	<a href="#">Public Health Infrastructure</a>
<a href="#">Health Care</a>	<a href="#">Schools</a>
<a href="#">Health Insurance</a>	<a href="#">Transportation</a>
<a href="#">Health IT</a>	<a href="#">Workplace</a>
<a href="#">Health Policy</a>	



## Social Determinants of Health



# The Community Guide



The screenshot shows the homepage of The Community Guide website. At the top, there is a navigation bar with the logo and menu items: Topics, CPSTF, Publications & Resources, and About. Below this is a search bar with the text "Search The Community Guide" and a "Search" button. The main content area features a headline "More than 25 years of evidence-based findings for population health" with a "Learn More" link. Below the headline is a large image of a smiling woman. Under the image is a section titled "New Publication About Engaging Community Health Workers for Cancer Screening" with a brief description. At the bottom, there is a section titled "Explore Popular Features of The Community Guide" with three columns of featured content, each with an icon and a title.

Search The Community Guide  Search

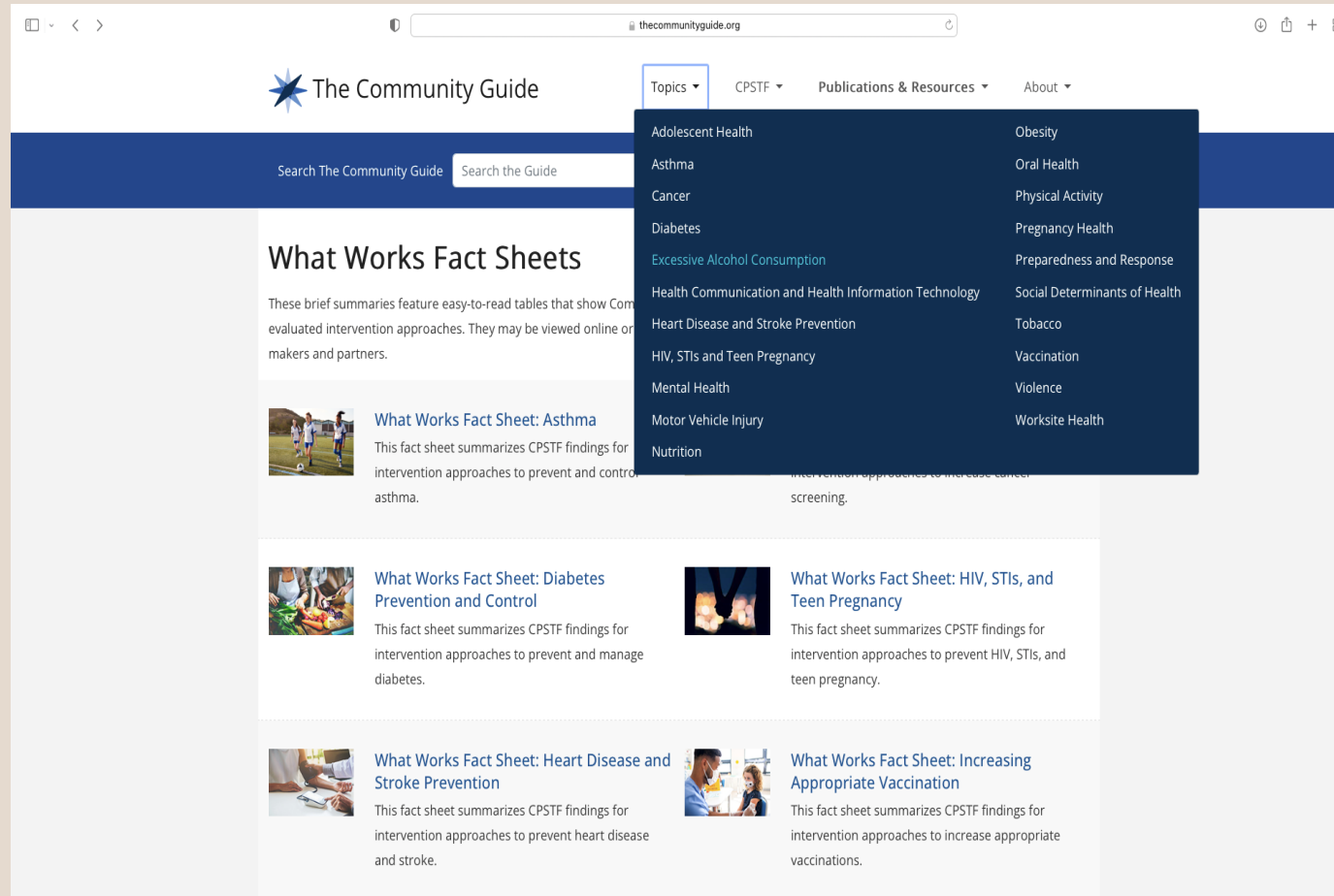
More than 25 years of evidence-based findings for population health [Learn More >](#)

**New Publication About Engaging Community Health Workers for Cancer Screening**  
New publication details systematic review findings for interventions that engage community health workers to increase breast, cervical, and colorectal cancer screening.

Explore Popular Features of The Community Guide

- Is Your Community Up to Date on Vaccinations?**  
Check out the CPSTF recommendations to increase vaccination coverage using
- The Community Guide in Action: Stories from the Field**  
Learn about people from across the country who have used The Community
- CPSTF Working to Advance Health Equity**  
Learn about CPSTF's key goals to advance health equity and their populations of

# Community Guide Topics



# **The Community Guide – High School Completion Evidence-based information**

## **Programs in order of Effectiveness:**

- Vocational training
- Alternative schools
- Social-emotional skills training
- College-oriented programming
- Mentoring and counseling
- Supplemental academic services
- School and class restructuring
- Multiservice packages
- Attendance monitoring and contingencies
- Community service
- Case management

## **OVERVIEW:**

- High school completion is an established predictor of long-term health. In the United States, a high school education can add about 7 years to one's life expectancy. The proportion of students who complete high school varies markedly by race and ethnicity. In 2010, 83% of whites, 66% of blacks, 71% of Hispanics, 94% of Asian/Pacific Islanders, and 69% of American Indian/Alaska Natives completed high school.
- High school completion rates are also associated with family income, and those from the lowest quartile are the least likely to have completed their education.

# Effective Evidence-based programs

## EDUCATION

School-based Health Centers, High School completion programs, Out-of-school time academic programs (General, Math-Focused, Reading-focused), Disability Inclusion

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## HEALTHCARE ACCESS

Depression and Suicide Risk in Children & Adolescents: Screening, Anxiety in children & Adolescents: Screening, Improving access to oral healthcare for vulnerable and underserved populations,

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## NEIGHBORHOOD AND ENVIRONMENT

Violence Prevention: School-based programs, Recommended Actions based on blood lead levels, A healthy home for everyone: A guide for families & individuals, Asthma school-based self-management interventions, Interventions to improve adherence to inhaled steroids

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## SOCIAL AND COMMUNITY

Healthy school meals for all, Person-to-Person interventions targeted to parents to improve adolescent health, Fostering healthy mental, emotional, & behavioral development in children and youth, Individual and group-based parenting programs

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## ECONOMIC

Healthy School Meals for all

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# summary

As school nurses who practice in public and population health, we are in a unique position to identify conditions that impact health and quality of life. We can use our clinical competence in our standards of practice, and our skills and knowledge in community and public health, care coordination, quality improvement, and leadership to keep our students in school, healthy, safe, and ready to learn.



# Resources

- Guide to Community Preventive Services. (2013). Social Determinants of Health: High School Completion Programs. Retrieved from <https://www.thecommunityguide.org/findings/social-determinants-health-high-school-completion-programs.html>
- Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [March 19, 2023], from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>
- ASCD & CDC. (2014). Whole school whole community whole child: A collaborative approach to learning and health. Retrieved from <http://www.ascd.org/ASCD/pdf/siteASCD/publications/wholechild/wsccl-a-collaborative-approach.pdf>

# Resources (continued)

- Anne E. Casey Foundation. (2021). New Hampshire indicators. Retrieved from <https://datacenter.kidscount.org/data#NH/2/0/char/0>
- McCaffrey, Paul. (2021). Dan Health: Three barriers to upstream thinking. Retrieved from <https://blogs.cfainstitute.org/investor/2021/05/18/dan-health-three-barriers-to-upstream-thinking/>
- De Silva, Prasantha (2021). Upstream vs downstream in public health. Retrieved from <https://theupstreamboat.com/upstream-vs-downstream-in-public-health/>
- Semega, J., Kollar, M., Creamer, J., Mehanty, A. (2019). Income and Poverty in the United States. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-266.pdf>

# Resources (continued)

- Dietrich, S. and Hernandez, E. (2022). Nearly 68 million people spoke a language other than English at home in 2019. Retrieved from <https://www.census.gov/library/stories/2022/12/languages-we-speak-in-united-states.html>
- National Center for Education Statistics. (2022). Characteristics of Children's Families. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved [date], from <https://nces.ed.gov/programs/coe/indicator/cce>.
- U.S. Census Bureau. (2022). Income, Poverty, and Health Insurance Coverage in the United States: 2021. Retrieved from <https://www.census.gov/newsroom/press-releases/2022/income-poverty-health-insurance-coverage.html>
- Centers for Disease Prevention and Control (2021). Violence prevention. <https://www.cdc.gov/violenceprevention/>
- Centers for Disease Prevention and Control (2022). Fast facts: Preventing adverse childhood experiences. Retrieved from <https://www.cdc.gov/violenceprevention/aces/fastfact.html>



thank you

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