

Group Activity

Total Time: 45 Minutes

(5 Minutes - Settle in; 10 Minutes - Discussion/Explanation; 10 Minutes - Brainstorming in Group; 30 Minutes - Group Work; 20 Minutes - Share/Debrief)

Audience: High School Students

Task: Give students data in different forms (graphs, words, pictures, etc.) and allow them to work in groups (3-4 students) to come up with ways to make their data visually pleasing. Have students present their work and explain why they chose to present their information in the way they chose. Each group of students will have a different topic that is relevant to current issues in public health. Allow the entire group to share 1 “glow” (something the group did well) and one “grow” (things the group could have done differently).

Discussion:

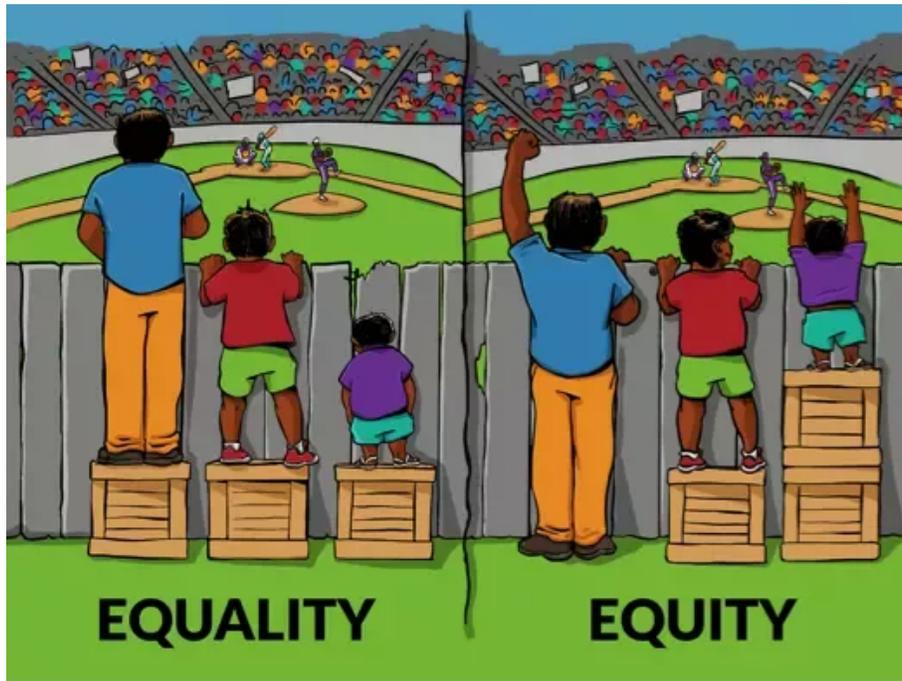
- Where do you usually see information/data?
- What are some qualities you have noticed about the way information is presented today?/ Why choose to display information in the form of an infographic? (Listen for ideas such as being easy to read, reaching out to many audiences, and being creative)
- Explain the impact of adding art to information.
 - It saves people time from having to read the information / gets the message across more quickly.
 - Some people are visual learners.
 - Helps to gain an audience and engage the audience.
 - Visual representations of data always present a goal or idea.
 - Social media and widespread viewing.
- As you create create your visual representations of the information provided, think about the following:
 - Simplicity
 - Spacing and Formatting
 - Symbols and Imagery
 - Audience
 - Creativity

Activity:

Topics:

1. Health Equity
2. Gun Violence
3. Homelessness and Heat Illness
4. Environment (Pollution)
5. School
6. Mental Health on College Campuses
7. Physical Activity and Nutrition

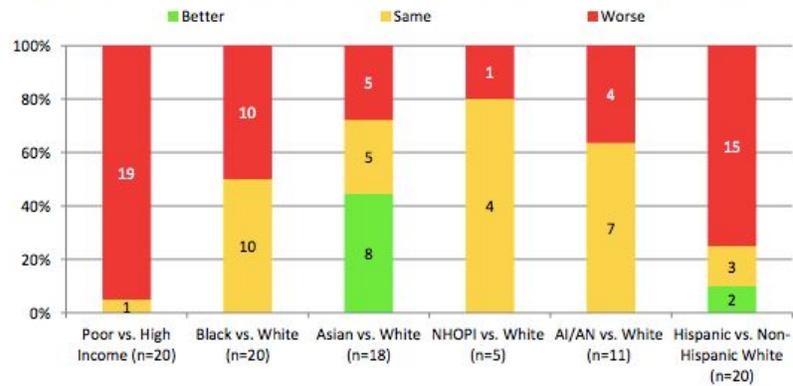
Topic: Health Equity



“Healthy People 2020 defines health equity as the ‘attainment of the highest level of health for all people.’”

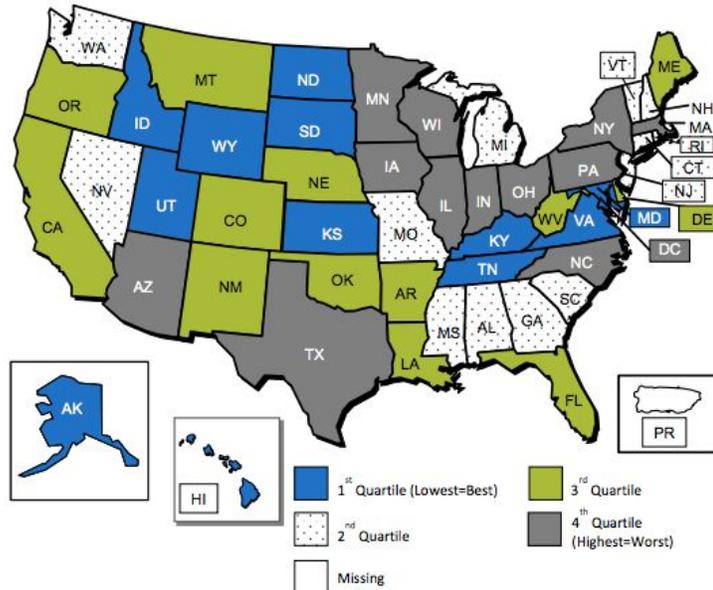
<https://healthequity.sfsu.edu/content/defining-health-equity>

Figure 10. Number and percentage of access measures for which members of selected groups experienced better, same, or worse access to care compared with reference group, 2013-2015



Key: n = number of measures; NHOPI = Native Hawaiian or Other Pacific Islander; AI/AN = American Indian or Alaska Native.
Note: The measures represented in this chart are available in Appendix B. The number of measures is based on the measures that have data for each population group.

Figure 8. Average differences in quality of care for Blacks, Hispanics, and Asians compared with Whites, by state, 2014-2015



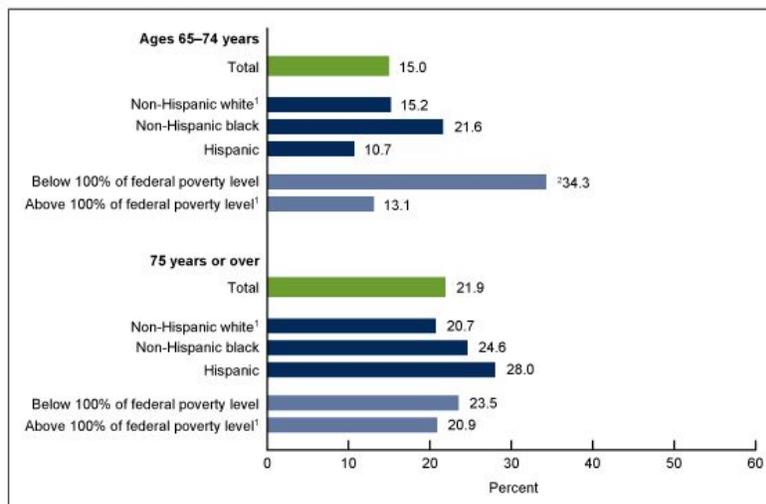
Note: All measures in this report that had state-level data to assess racial and ethnic disparities were used. Separate quality scores were computed for Whites, Blacks, Hispanics, and Asians. For each state, the average of the Black, Hispanic, and Asian scores was divided by the White score. State-level AI/AN data were not available for analysis. States were ranked on this ratio, and quartiles are shown on the map. Disparity scores were not risk adjusted for population characteristics in each state. The states with the worst disparity score are in the fourth quartile, and states with the best disparity score are in the first quartile.

<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/nhqdr16/2016qdr.pdf>

During 2010, among persons aged 18–64 years, uninsured rates for poor (those living at the federal poverty level [FPL]) and near poor persons (those at <3.0 times FPL) ranged from 34.2% to 41.2%, and these rates were significantly higher ($p < 0.001$) than the uninsured rate among the nonpoor (those at ≥ 3.0 FPL) (Table 1). Approximately half (50.7%) of uninsured adults were near poor (Table 2). During 2010, income for the near poor ranged from \$22,314 to \$66,942 per year for a family of four. Uninsured rates for persons in the poor and near poor categories increased significantly ($p < 0.014$) from 2008 (37.0% and 30.5%, respectively) to 2010 (41.2% and 34.2%, respectively). The uninsured rate for non-Hispanic blacks also increased significantly ($p < 0.002$) from 22.1% in 2008 to 26.2% in 2010. No significant difference existed in the uninsured rate between 2008 (41.6%) and 2010 (41.0%) for the Hispanic population (Table 1).

https://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a10.htm?s_cid=su6203a10_w

Figure 4. Prevalence of edentulism among older adults, by age, race and ethnicity, and poverty level: United States, 2009–2010.



¹ Reference group.

² $p < 0.05$.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2009–2010.

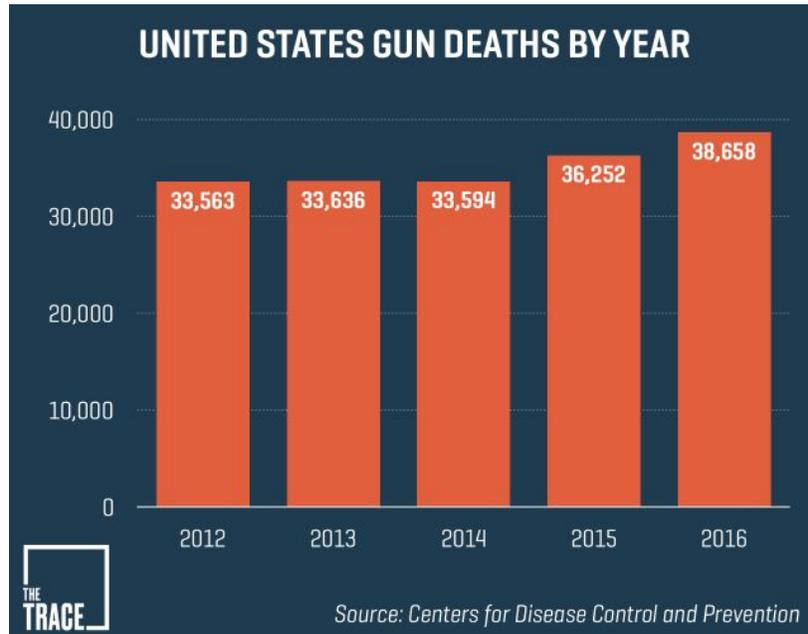
Life expectancy at birth has improved substantially during the past 6½ decades, increasing from 69.7 years for the total U.S. population in 1950 to 78.8 years in 2014.¹³ However, despite the overall improvement, black-white and gender disparities in life expectancy persist (Figure 2.7).

In 1950, blacks had a life expectancy of 60.8 years compared with 69.1 years for whites. In 2014, the black and white life expectancies were 75.6 and 79.0 years respectively. In 1950, the life expectancy at birth for white males, white females, black males, and black females were 66.2, 72.2, 59.1, and 62.9 years respectively. In 2014, the corresponding figures for these race-gender groups were 76.7, 81.4, 72.5, and 78.4 years. In 2014, life expectancy at birth for Hispanic males and females were 79.2 and 84.0 years respectively, higher than that for their non-Hispanic white and black counterparts.

(2017)

<https://www.hrsa.gov/sites/default/files/hrsa/health-equity/2017-HRSA-health-equity-report.pdf>

Topic: Gun Violence



<https://www.thetrace.org/rounds/gun-deaths-increase-2017/>

Gun violence is a leading cause of death in America

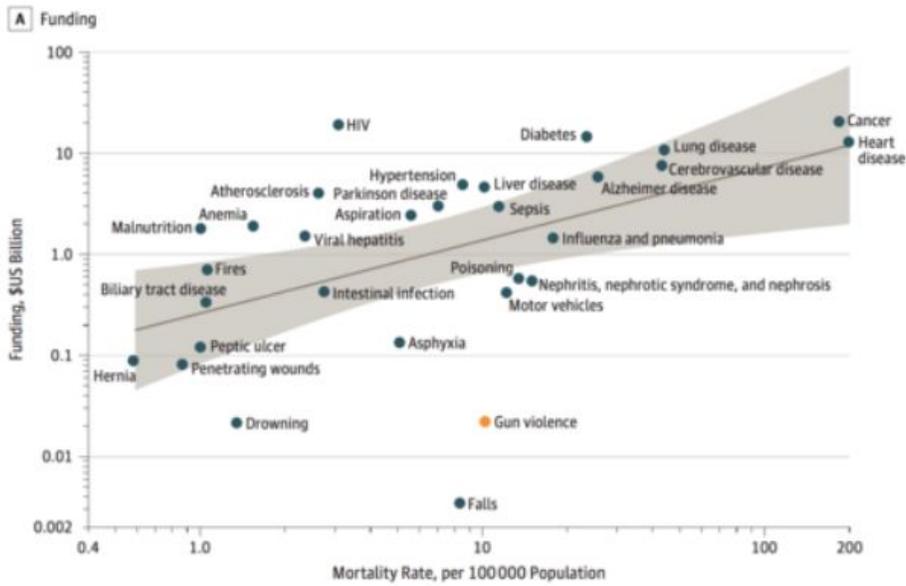
CAUSE OF DEATH	LIFETIME ODDS	CAUSE OF DEATH	LIFETIME ODDS
Heart disease	1 in 6	Airplane, boat, and spaceship incidents	1 in 2,499
Cancer	1 in 7	Assault by sharp object	1 in 2,517
Any injury	1 in 19	Any force of nature	1 in 2,586
Chronic lung disease	1 in 26	Choking on food	1 in 3,461
Any accident	1 in 28	Bicycling	1 in 4,030
Stroke	1 in 29	Police/law enforcement	1 in 7,703
Alzheimer's disease	1 in 37	Accidental gunshot	1 in 8,349
Diabetes	1 in 51	Mass shooting	1 in 11,125
Influenza and pneumonia	1 in 72	Electricity/radiation/heat/pressure	1 in 15,210
Drugs	1 in 72	Heat wave	1 in 16,581
Kidney disease	1 in 82	Sharp objects	1 in 32,403
Poisoning (accidental, including drug overdoses)	1 in 86	Venomous animal or plant	1 in 44,459
Suicide	1 in 92	Foreign-born terrorist	1 in 45,785
Any motor vehicle incident	1 in 108	Tornado	1 in 60,000
Falling	1 in 122	Stinging by hornets, wasps, and bees	1 in 63,215
Alcohol	1 in 123	Cataclysmic storm	1 in 66,324
Murder	1 in 229	Asteroid strike (global impact)	1 in 75,000
Assault by gun	1 in 315	Bus, train, or streetcar	1 in 101,144
Riding inside a car, van, or truck	1 in 491	Dog attack	1 in 112,382
Suffocation	1 in 591	Legal execution	1 in 118,993
Pedestrian	1 in 611	Earthquake	1 in 130,000
Motorcycle	1 in 921	Lightning	1 in 161,831
Drowning	1 in 1,133	Asteroid strike (regional impact)	1 in 1,600,000
Fire or smoke	1 in 1,579	Shark attack	1 in 8,000,000

Note: Most odds based on 2015 death, population, and life expectancy data. Gun deaths were counted as mass shootings when four or more victims were shot. Terrorism odds based on 41-year average (1975-2015).

Sources: National Safety Council; National Center for Health Statistics; Alex Nowrasteh/Cato Institute; Stephen A. Nelson/Tulane University; "Natural Disasters"/Patrick L. Abbott; Gun Violence Archive

BUSINESS INSIDER

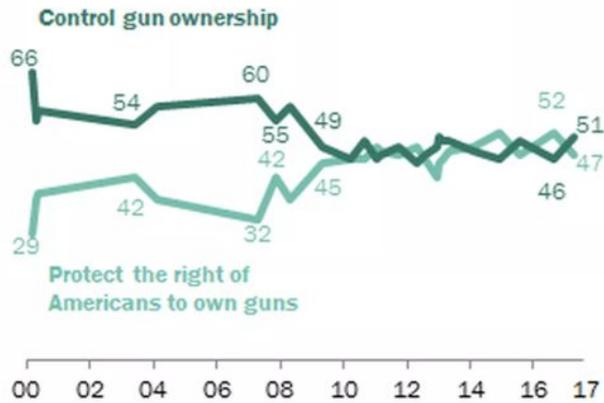
<http://www.businessinsider.com/us-gun-death-murder-risk-statistics-2018-3>



<http://www.businessinsider.com/us-gun-death-murder-risk-statistics-2018-3>

Public remains closely divided on controlling guns and protecting rights

% saying it is more important to ...

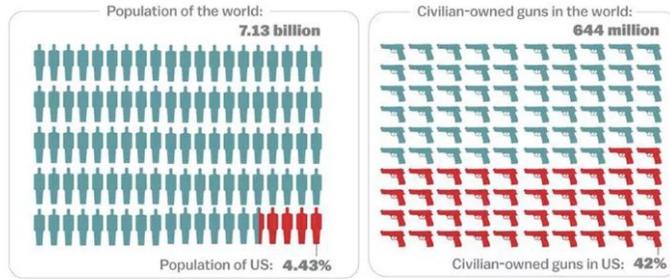


Note: Share of respondents who didn't offer an answer not shown
 Source: Survey of U.S. adults conducted April 5-11, 2017.
 "America's Complex Relationship With Guns"

<https://www.vox.com/policy-and-politics/2017/10/2/16399418/us-gun-violence-statistics-maps-charts>

2) America has 4.4 percent of the world's population, but almost half of the civilian-owned guns around the world

Americans own a ridiculous number of guns



SOURCE: UNODC, Small Arms Survey, via The Guardian.

Vox

According to the National Crime Victimization Survey, 467,321 persons were victims of a crime committed with a firearm in 2011.^[1] In the same year, data collected by the FBI show that firearms were used in 68 percent of murders, 41 percent of robbery offenses and 21 percent of aggravated assaults nationwide.^[2]

<https://www.nij.gov/topics/crime/gun-violence/pages/welcome.aspx>

Price of a gun in the US

Assault rifles like the ones reportedly found in Paddock's room



Approximately
= \$1500 =



Macbook

Handguns, which were also reportedly among Paddock's arsenal



Approximately
= \$200 =



Chromebook

BBC

<https://www.bbc.com/news/world-us-canada-41488081>

357 Million

That was the number of guns in the United States in 2013, according to a [Washington Post review of data](#) from the Congressional Research Service and the Bureau of Alcohol, Tobacco, and Firearms. At the time that figure was determined, there were only 317 million people living in the United States – meaning the country had roughly 40 million more firearms than residents.

3 percent

That's the percentage of people who own over half of the nation's guns, according to [survey data](#) compiled by researchers at Harvard University and Northwestern University.

400,000

That's the number of firearms stolen every year, according to the same Harvard/Northwestern survey data.

Over 3 million

That's the number of times federal, state, or local background checks have denied a gun to person prohibited from owning one, [according to a Department of Justice study published in 2016](#).

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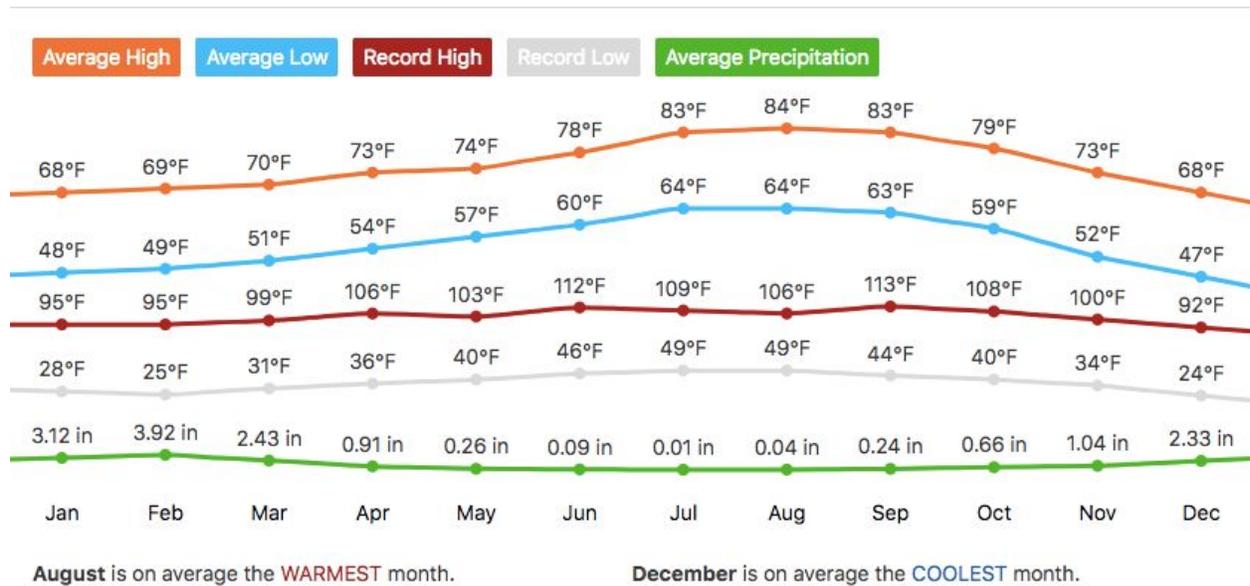
That's the number of times a weapon has been fired on school grounds in 2018, [according to Everytown for Gun Safety](#), a group that favors stricter regulations on guns.

<https://www.cbsnews.com/news/gun-ownership-and-gun-violence-in-america-by-the-numbers/>

Topic: Homelessness and Heat Illness

“People experiencing homelessness can be individuals, children, or families. As of 2015, 37% of people experiencing homelessness were in families with children, 64% experienced homelessness as individuals, and 6% were children.”

<http://www.understandhomelessness.com/>



Weather Data for Los Angeles, California

<https://weather.com/weather/monthly//Los+Angeles+CA+USCA0638:1:US>

“More than 25 million people are under excessive heat watches, warnings, or advisories, including in Los Angeles, San Diego, Las Vegas, and Phoenix metro areas.”

CNN Report (July 6, 2018)

<https://www.cnn.com/2018/07/06/us/heat-wave-wxc/index.html>



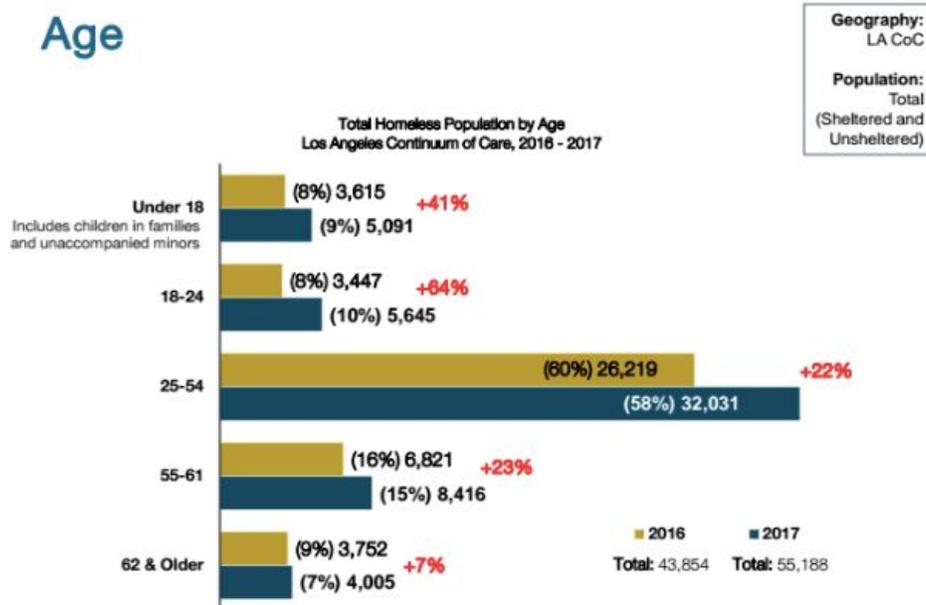
Red Means...

High heat risk for much of population especially those who are heat sensitive and those without effective cooling

Purple Means...

Very high heat risk for entire population due to long duration heat, with little or no relief overnight

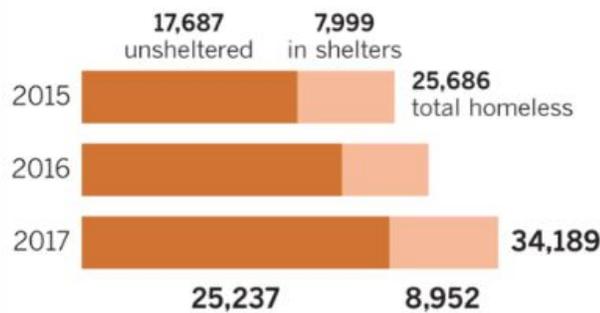
Age



LA CoC excludes Glendale, Pasadena, and Long Beach CoCs

Share of total homeless population in parentheses.

City of Los Angeles homeless population



Source Los Angeles Homeless Services Authority

Jon Schleuss / @latimesgraphics

Symptoms of Heat Exhaustion:

- Headache, Nausea, Fatigue, Dizziness or Lightheadedness, Actively Sweating, Skin cool and pale, core temperature over 102 degrees

http://www.lapdonline.org/crime_prevention/content_basic_view/8848

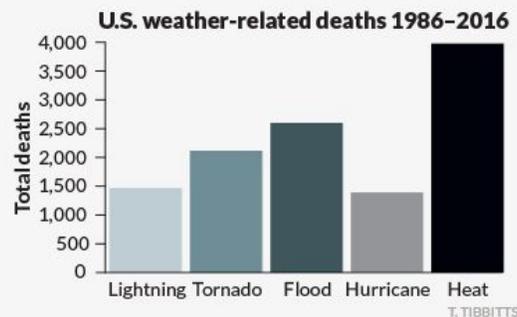
Treatment for Heat Exhaustion:

- Shady Place or air conditioned room, keep cool, increase fluids, cold wet towels, fan, may require intravenous fluids, immediate action necessary.

http://www.lapdonline.org/crime_prevention/content_basic_view/8848

Weather dangers

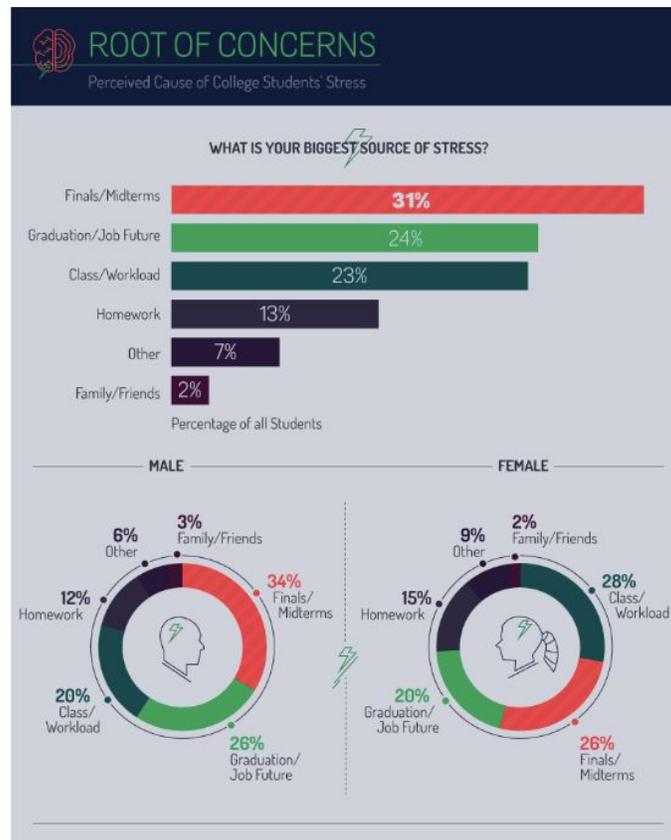
Although tornadoes, floods and hurricanes tend to get more attention, U.S. heat fatalities top the list of weather-related deaths in the 30 years since heat-related data were first reported.



Source: National Weather Service

<https://www.sciencenews.org/article/are-we-ready-deadly-heat-waves-future>

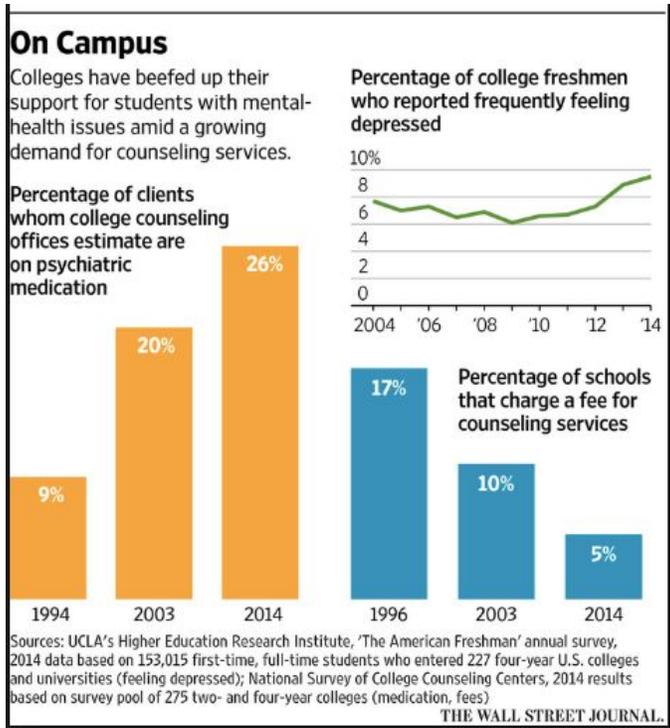
Topic: Mental Health on College Campuses



<https://www.mentalhelp.net/aware/mental-health-on-campus/>

Between 2009 and 2015, the number of students visiting counseling centers increased by about 30% on average, while enrollment grew by less than 6%, the Center for Collegiate Mental Health found in a 2015 report. Students seeking help are increasingly likely to have attempted suicide or engaged in self-harm, the center found. In spring 2017, nearly 40% of college students said they had felt so depressed in the prior year that it was difficult for them to function, and 61% of students said they had “felt overwhelming anxiety” in the same time period, according to an American College Health Association survey of more than 63,000 students at 92 schools.

<http://time.com/5190291/anxiety-depression-college-university-students/>



<https://www.wsj.com/articles/mental-health-crunch-on-campus-1430082408>

Student Suicide

3x The suicide rate among 15-24 year-olds has tripled since the 1950s.

Every year, 6% of undergrads & 4% of graduate students seriously consider suicide.

Most at Risk
Community college students, international students, LGBTQ students, and veterans are most at risk for suicide

Most Important Accommodations for Students with Mental Health Disabilities

- Excused absences for treatment (54%)
- Medical leaves of absence and course withdrawals without penalty (46%)
- Adjustments in test settings (34%)
- Homework deadline extensions and adjustments in test times (33%)
- Increased availability of academic advisors (32%)

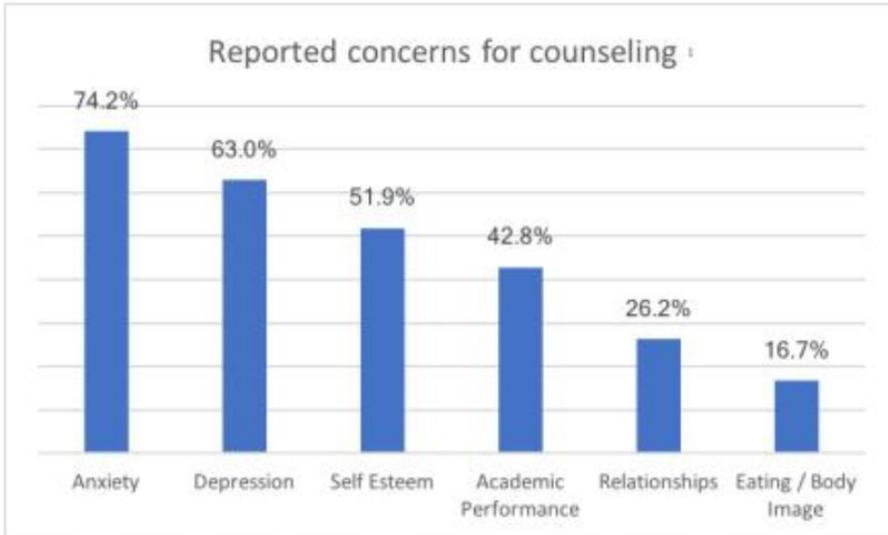
https://ncd.gov/sites/default/files/NCD_Mental_Health_Report_508_o.pdf

More than 75 percent of all mental health conditions begin before the age of 24, according to the [National Alliance on Mental Illness](#), which is why college is such a critical time.

<https://www.nbcnews.com/feature/college-game-plan/opioid-crisis-how-america-s-colleges-are-reacting-epidemic-n797696>

In addition, the [Center for Collegiate Mental Health at Penn State](#), which annually reports on college students receiving mental health services, found that the number who have purposely injured themselves (for instance, by cutting themselves) rose steadily [to almost 26 percent](#) in the 2015-16 school year, from 21.8 percent in 2010-11. The same upward trend was true of those who seriously considered attempting suicide — rising to 33.2 percent, up from 23.8 percent, over the same period.

<https://www.nytimes.com/2017/06/07/education/colleges-get-proactive-in-addressing-depression-on-campus.html>



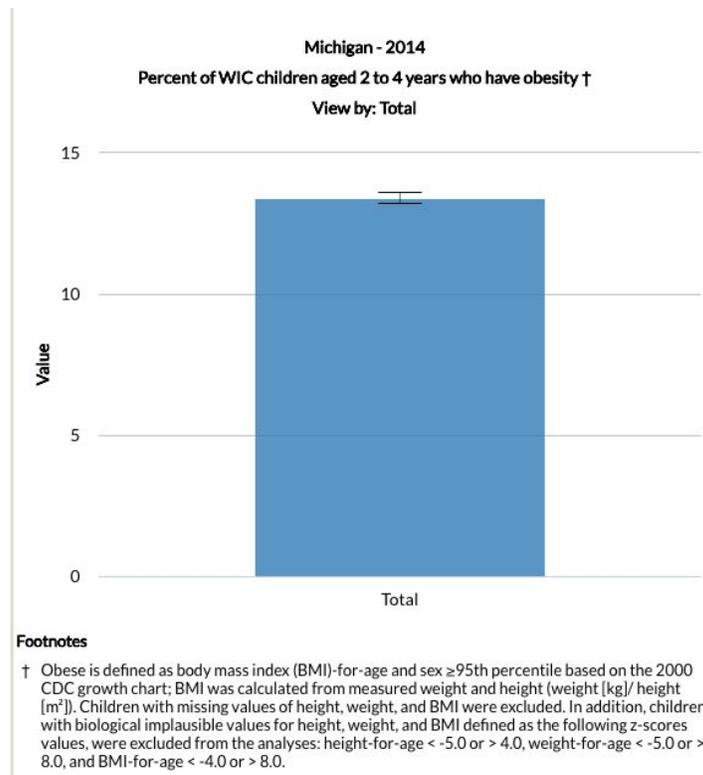
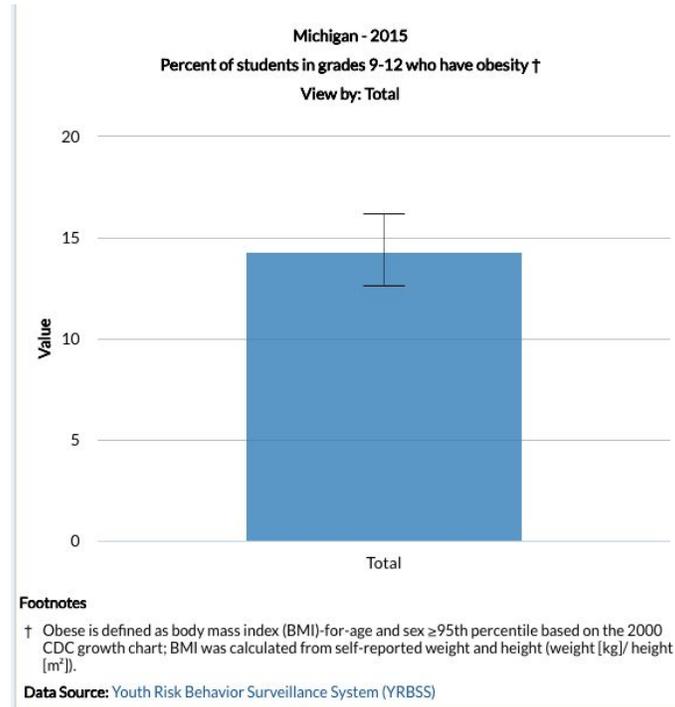
(CAPS UMICH)

Client Characteristics	
International Students	11%
Transfer Students	11%
First Generation Students	16%
Counseling Prior to College	17%
Medication Prior to College	5%
Indicate Suicidal Thoughts	38%
Self-Injury in Last Year	13%
Unwanted Sexual Experience in Last Year	6%
Binge Drinking After Starting College	36%

(CAPS UMICH)

<https://caps.umich.edu/article/annual-reports>

Topic: Physical Activity and Nutrition

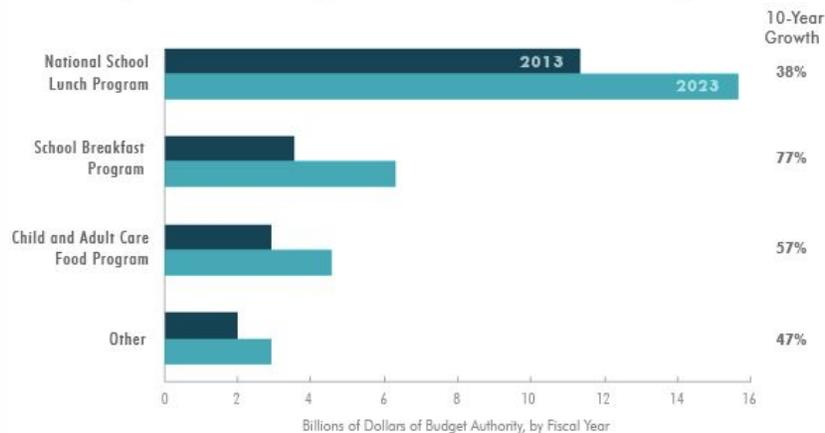


Eating Behaviors of Young People

- Between 2001 and 2010, consumption of sugar-sweetened beverages among children and adolescents decreased, but still accounts for 10% of total caloric intake.¹⁰
- Between 2003 and 2010, total fruit intake and whole fruit intake among children and adolescents increased. However, most youth still do not meet fruit and vegetable recommendations.^{11,12}
- Empty calories from added sugars and solid fats contribute to 40% of daily calories for children and adolescents age 2–18 years—affecting the overall quality of their diets. Approximately half of these empty calories come from six sources: soda, fruit drinks, dairy desserts, grain desserts, pizza, and whole milk.⁴ Most youth do not consume the recommended amount of total water.¹³

<https://www.cdc.gov/healthyschools/nutrition/facts.htm>

Projected Funding for Child Nutrition Programs

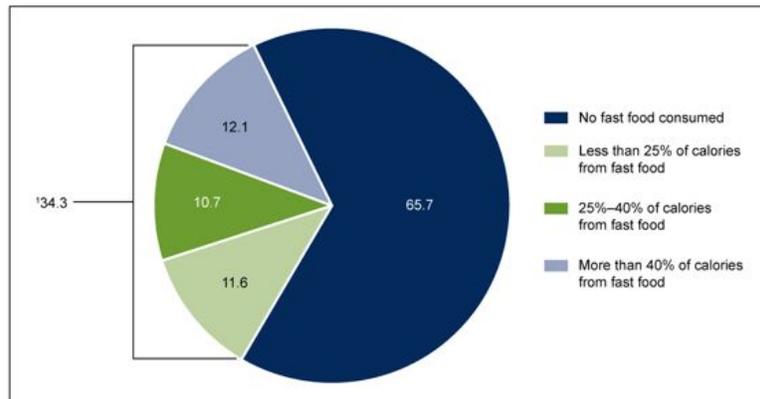


CONGRESSIONAL BUDGET OFFICE

MARCH 2013 • WWW.CBO.GOV/PUBLICATION/43984

<https://www.cbo.gov/publication/43984>

Figure 1. Percentage of children and adolescents aged 2–19 years who consumed fast food on a given day, by calories consumed: United States, 2011–2012

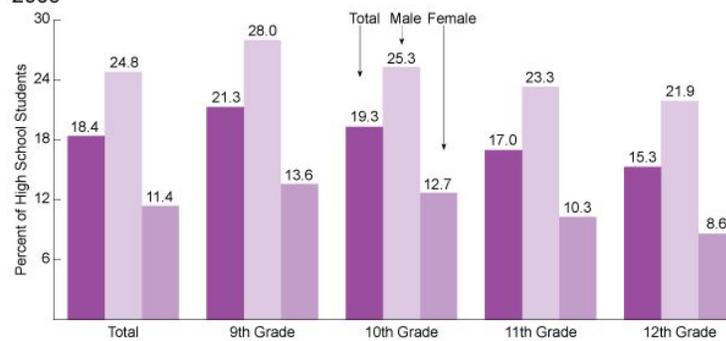


¹Individual percentages do not add to 34.3 due to rounding.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2011–2012.

<https://www.cdc.gov/nchs/data/databriefs/db213.htm>

Physical Activity* Among High School Students, by Grade Level and Sex, 2009



*Met recommended levels of physical activity, which is one hour or more of physical activity every day, most of which should be moderate-to vigorous-intensity aerobic activity.

Source: Centers for Disease Control and Prevention (CDC). 1991–2009 High School Youth Risk Behavior Survey Data. Available at: <http://apps.nccd.cdc.gov/youthonline>. Accessed July 2011.

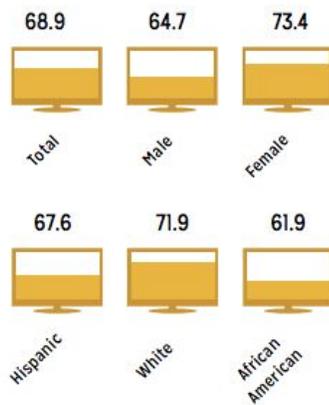
Among children and adolescents, physical activity can:

- Improve bone health
- Improve cardiorespiratory and muscular fitness
- Decrease levels of body fat
- Reduce symptoms of depression
- Improve cognitive skills³
- Improve ability to concentrate and pay attention³

For people who are inactive, even small increases in physical activity are associated with health benefits.

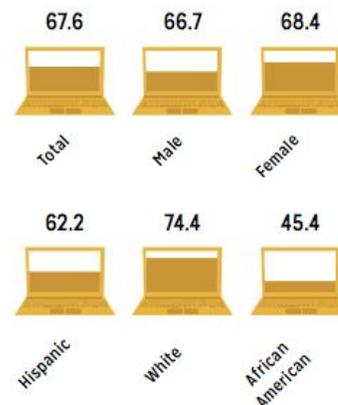
<https://www.healthypeople.gov/2020/topics-objectives/topic/physical-activity>

Figure 5. Prevalence (%) of U.S. high school students self-reporting meeting screen time guidelines for television [32].



Source: 2011 Youth Risk Behavior Surveillance System, Eaton, D.K., et al., Youth risk behavior surveillance - United States, 2011. MMWR Surveill Summ, 2012, 61(4): p. 1-162 [32].

Figure 6. Prevalence (%) of U.S. high school students self-reporting meeting screen time guidelines for computers/computer games [32].



Source: 2011 Youth Risk Behavior Surveillance System, Eaton, D.K., et al., Youth risk behavior surveillance - United States, 2011. MMWR Surveill Summ, 2012, 61(4): p. 1-162 [32].

http://www.physicalactivityplan.org/reportcard/NationalReportCard_longform_final%20for%20web.pdf



http://www.health.gov.fj/?page_id=1442