

# — Special Report —

**Workplace health risk:** The high costs of lost productivity and additional healthcare associated with employees' unhealthy habits



**Fully-referenced with links to data for:**

Tobacco • Obesity • Physical inactivity • Work stress • Alcohol • Poor sleep • Diabetes

## About this report

Each year, US organizations incur significant excess costs as a result of employees' unhealthy lifestyles. Business impacts include increased absenteeism, reduced productivity at work ("presenteeism"), reduced team efficiency and morale, and increased health costs.

However, locating studies that quantify such costs in an employee-centric way that is meaningful to organizational decision makers, particularly the C-suite, is a difficult and time-consuming task. After many months combing the literature, SelfHelpWorks has compiled this report as a quick reference guide.

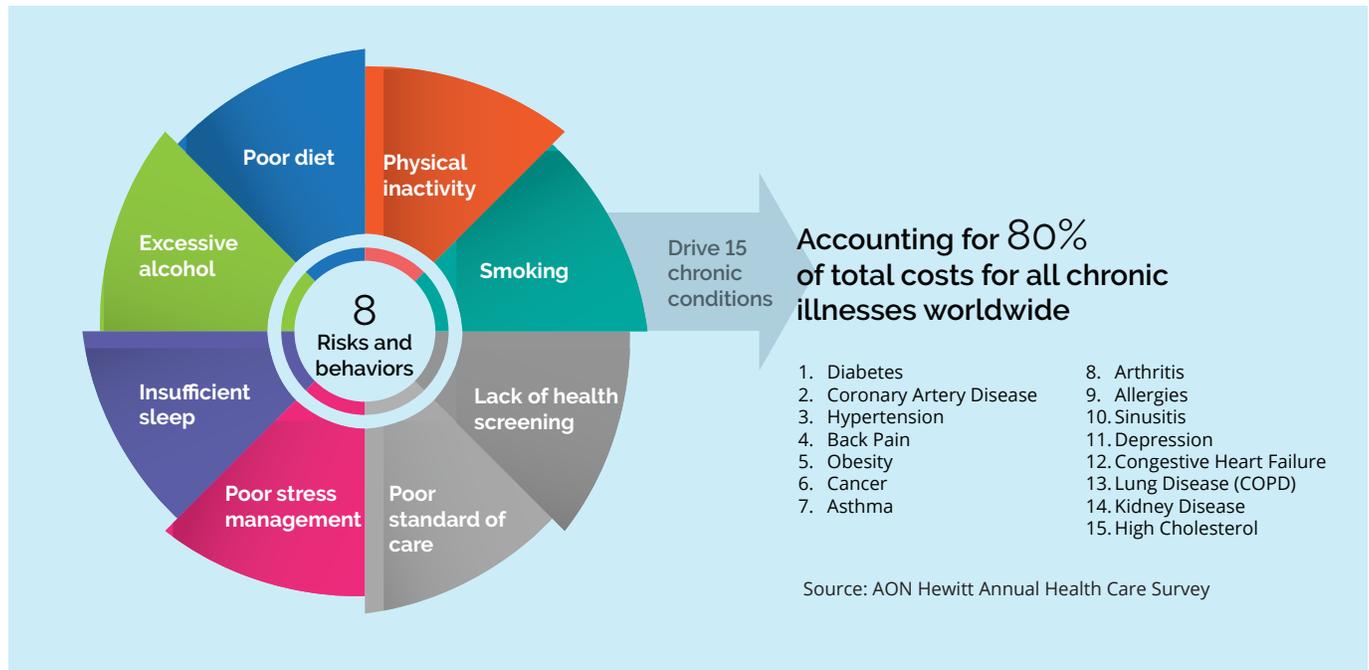
The report illustrates the prevalence and cost impact of six key unhealthy lifestyle behaviors known to cause chronic disease. It also provides data regarding the prevalence and per-capita costs of diabetes, an increasingly common condition. The onset of diabetes is commonly associated with an unhealthy lifestyle, and its progression is usually associated with poor lifestyle management.

Two cost factors are addressed in this report: additional healthcare spend and productivity loss. The data illustrates that the benefits of implementing an effective lifestyle risk-reduction program can be significant.

**Disclaimer:** The data and source references cited in this document are not the result of an exhaustive literature review and are for illustrative purposes only. The data shown in this report may vary from data in other studies that are not shown here. Prevalence data is based on the total US adult population. Historical costs have not been adjusted to current dollars. Data may be influenced by numerous factors, for example geographical location, industry and demographic makeup, and may vary significantly within a specific population.

# The six key unhealthy lifestyle risks

As shown below, 80% of all chronic disease costs are a result of eight key health-related risks that drive 15 chronic conditions. Six of the eight risks are behavioral in nature—eliminating these unhealthy behaviors is up to the individual.

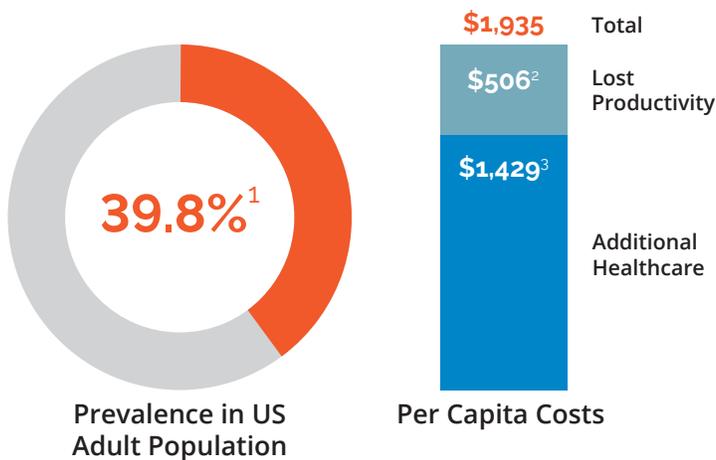


**Insight:** This data offers great hope because it suggests that most chronic conditions—and the massive healthcare and other costs they drive—can be prevented by simply helping people avoid or eliminate the six key unhealthy behaviors. However, in reality each of these behaviors can be very difficult to change once they become a habit. The reason is that they have an emotional component that usually resists traditional behavior modification techniques.

## Prevalence and per capita costs

The following charts show the prevalence of each key behavioral issue, along with additional per capita healthcare and lost productivity costs. Please note that statistics are shown for obesity rather than for poor diet *per se* because—although the potential consequences of a poor diet are numerous—obesity is currently of major concern in US health.

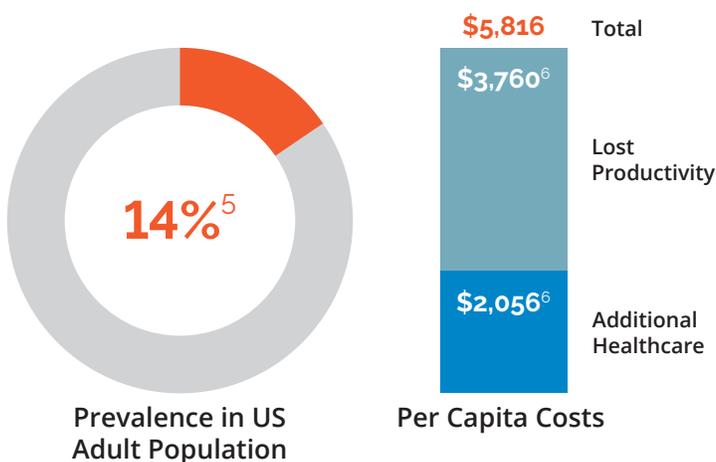
## Obesity



### Insight

A recent Duke University study<sup>4</sup> found that the biggest perceived barriers to healthy eating in a workplace weight management program were lack of self-control and convenience. The biggest barriers to exercise were lack of interest and motivation. In other words, weight management begins in the mind, not the body.

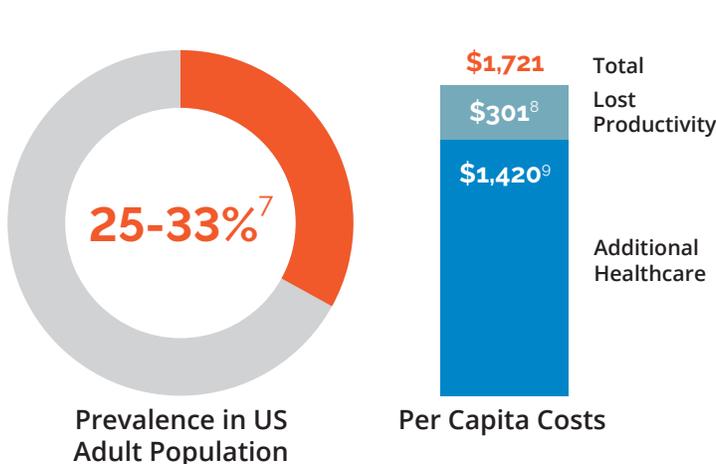
## Smoking



### Insight

Although smoking has declined in recent years, electronic cigarettes and smokeless tobacco have gained popularity. What makes tobacco so difficult to quit is that there are in fact two addictions that need to be addressed—a physiological addiction to nicotine, and a psychological addiction to the habit.

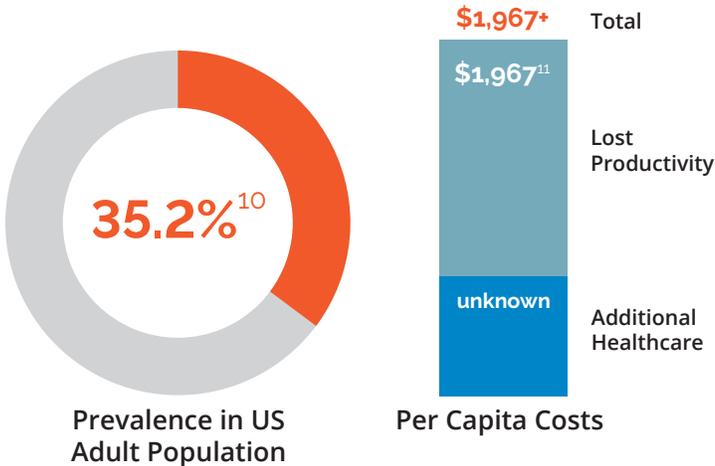
## High stress at work



### Insight

The very nature of today's competitive business climate makes it impossible to eliminate stress from the workplace. In addition to removing environmental stressors, consider implementing cognitive solutions that help build resilience by retraining the brain's habitual reaction to the recurring stressful situations employees face on a regular basis.

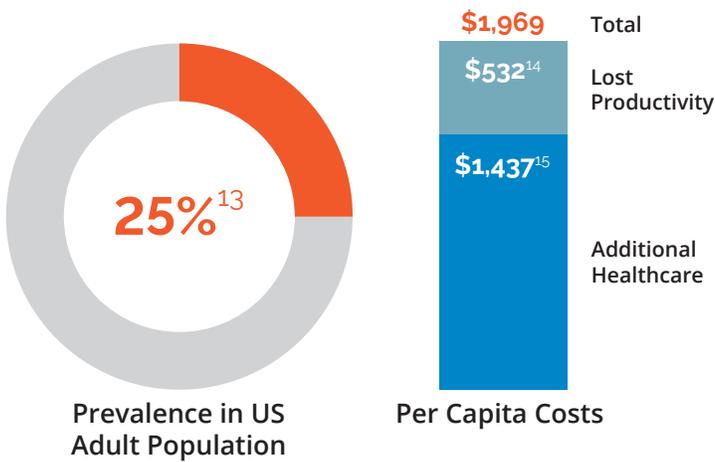
## Poor sleep



### Insight

Accidents caused by sleep-deprived employees can have devastating consequences. At any given point in time, an individual that sleeps on average less than six hours per night has a 13% higher mortality risk than an individual sleeping between seven and nine hours.<sup>12</sup>

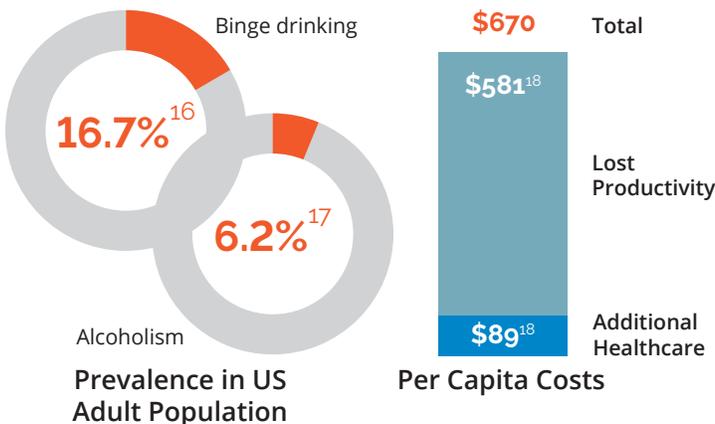
## Physically inactive



### Insight

25% of US adults are not active at all, and a further 35% are not active enough to meet recommended levels<sup>13</sup>. The biggest barriers to exercise in a workplace weight management program were lack of interest and motivation<sup>4</sup>, suggesting that appropriate psychologically-based components may improve the efficacy of exercise programs for those who don't exercise enough.

## Binge drinking & alcoholism



### Insight

One in six US adults binge drinks about four times a month, consuming about seven drinks per binge<sup>16</sup>. Although binge drinking is not considered on the same level as alcoholism, it may lead to alcoholism and can be incredibly difficult to stop once it becomes a habit.

## What these costs translate into for an average US adult population

The data shown in the following table is not the result of an exhaustive literature review. Furthermore, it may be influenced by numerous factors within a specific population, for example geographical location, industry, and demographic makeup. Accordingly, this information is for illustrative purposes only.

Modifiable Health Risk	Prevalence in US Adult Population	Per Capita Costs			Average Cost per 100 Employees <sup>†</sup>
		Additional Healthcare	Productivity Loss	Total	
Obesity	39.8% <sup>1</sup>	\$1,429 <sup>3</sup>	\$506 <sup>2</sup>	\$1,935	<b>\$77,013</b>
Smoking	14.0% <sup>5</sup>	\$2,056 <sup>6</sup>	\$3,760 <sup>6</sup>	\$5,816	<b>\$81,424</b>
High stress at work	25-33% <sup>7</sup>	\$1,420 <sup>9</sup>	\$301 <sup>8</sup>	\$1,721	<b>\$49,909</b>
Poor sleep	35.2% <sup>10</sup>	Unknown <sup>12</sup>	\$1,967 <sup>11</sup>	\$1,967+	<b>\$69,238</b>
Physically inactive	25.0% <sup>13</sup>	\$1,437 <sup>15</sup>	\$532 <sup>14</sup>	\$1,969	<b>\$49,225</b>
Excessive alcohol		\$89 <sup>18</sup>	\$581 <sup>18</sup>	\$670	<b>\$15,343</b>
• Binge drinking <sup>*</sup>	16.7% <sup>16</sup>				
• Alcoholism	6.2% <sup>17</sup>				
<b>Total per 100 Employees</b>					<b>\$342,152</b>

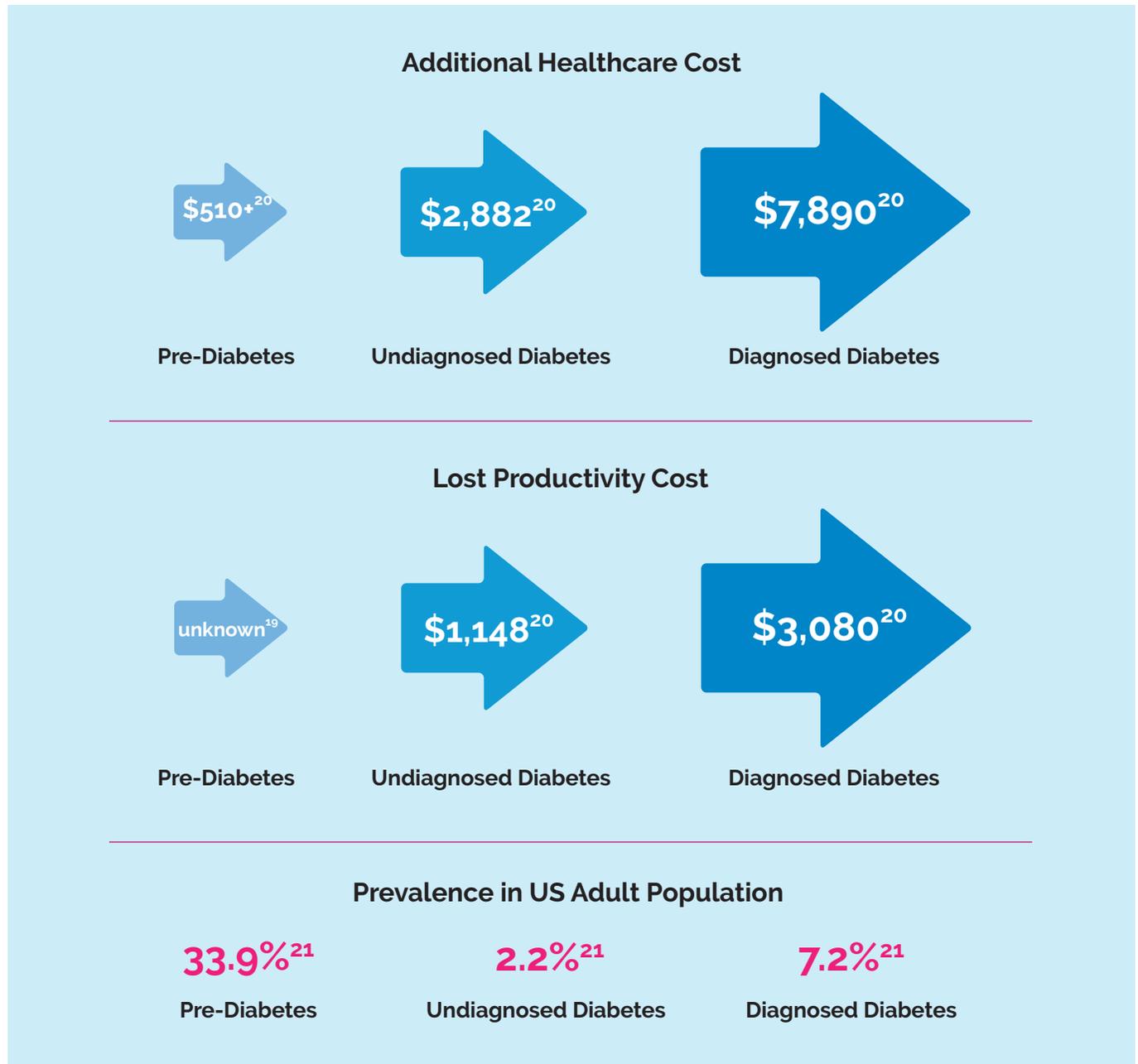
\*- 7 or more drinks at least 4 times per month

<sup>†</sup>Total costs per 100 employees = (% Prevalence x Total Costs/Person x 100)

**Insight:** Based on the above data, the organizational cost impact of the six key modifiable health risks averages over \$3,400 per employee per year. If you do the math, almost \$1,800 per employee per year is due to lost productivity—a “real-time” cost that impacts both self-insured and fully-insured organizations. In view of the potentially significant savings, it would be prudent to consider investing in appropriate programs to help employees prevent or end their struggles with the six key unhealthy behaviors.

## A potential consequence of not addressing these unhealthy habits

Diabetes, a devastating and expensive chronic disease, is growing at epidemic proportions in the US. Type 2 diabetes—which accounts for 95% of all cases—is usually a direct result of an unhealthy lifestyle.



**Insight:** As this example illustrates, unhealthy lifestyles can become increasingly more expensive as they develop into chronic medical conditions. Once a chronic condition has developed, maintaining a healthy lifestyle—along with appropriate treatment—is usually an important factor in successfully managing it.

## Final insights

The data strongly suggests that the benefits of implementing appropriate programs targeting the six key behavioral risks can be significant—not only for the individual, but also for their employer, health provider, health plan and other stakeholders.

However, these behaviors are usually very difficult to change once they become a habit, because they have an emotional component that often resists traditional behavior modification techniques. They require something “stronger” than the standard apps, trackers and challenges commonly offered to employees.

Consider filling the gap with interventions that are specifically designed to transform the thought process and break down emotional barriers to change.

## About SelfHelpWorks

Since 1999 SelfHelpWorks has partnered with employers, wellness vendors, health plans and healthcare providers to help people achieve lasting behavior change that lowers chronic disease risk, improves health, and enhances outcomes.

The online programs target unhealthy eating and obesity, tobacco addiction, poor stress management and resiliency, insomnia, physical inactivity, excessive alcohol use, and poor diabetes management. The programs utilize a proprietary, evidence-based training process derived from Cognitive Behavioral Therapy to transform the beliefs and thoughts that fuel unhealthy behaviors.

All programs are mobile-friendly, video-based, expert-led, and scalable. They are easily integrated into existing portals or can stand alone. Features include multiple configuration options, white labeling, HIPAA-compliant reporting, custom data feeds and more.

[www.SelfHelpWorks.com](http://www.SelfHelpWorks.com)

# References

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- <sup>4</sup> <https://www.ncbi.nlm.nih.gov/pubmed/28692017> - Perceived Barriers to Healthy Eating and Physical Activity Among Participants in a Workplace Obesity Intervention, *J Occup Environ Med*. 2017 Aug;59(8):746-751
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- <sup>6</sup> <https://www.ncbi.nlm.nih.gov/pubmed/23733918> - Estimating the cost of a smoking employee, *Tobacco Control*, 2014 Sep;23(5):428-33
- <sup>7</sup> <https://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/StressWork.html>
- <sup>8</sup> <https://www.stress.org/workplace-stress/> - [Calculation: More than half of lost work days are stress-related, so 50% of \$602/worker/year = \$301]
- <sup>9</sup> <https://www.ncbi.nlm.nih.gov/pubmed/26641823> [Calculation:  $\{(19.7 / [19.7+25.7]) \text{ no med cond.} \times 712\} + \{(25.7 / [19.7+25.7]) \text{ med cond.} \times 1,962\} = \$1,420$ ] - The Portion of Health Care Costs Associated With Lifestyle-Related Modifiable Health Risks Based on a Sample of 223,461 Employees in Seven Industries: The UM-HMRC Study, *J Occup Environ Med*. 2015 Dec;57(12):1284-90
- <sup>10</sup> [https://www.cdc.gov/sleep/data\\_statistics.html](https://www.cdc.gov/sleep/data_statistics.html)
- <sup>11</sup> <https://www.ncbi.nlm.nih.gov/pubmed/20042880> - The cost of poor sleep: workplace productivity loss and associated costs, *J Occup Environ Med*. 2010 Jan;52(1):91-8
- <sup>12</sup> Although no studies were found showing per-capita increases in healthcare costs for poor sleep, this issue is associated with up to 13% increase in mortality risk - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5627640/>
- <sup>13</sup> <https://www.cdc.gov/nccdphp/sgr/adults.htm>
- <sup>14</sup> Combination of lost productive time (LPT) study and Bureau of Labor Statistics average hourly wage: .48 lost hours/week x \$887/week = \$532/year - [https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/36716/Standish\\_washington\\_02500\\_15831.pdf?sequence=1](https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/36716/Standish_washington_02500_15831.pdf?sequence=1) - Relationship Between Workplace Productivity and Physical Activity Among an Employed Healthcare Workforce, *MPH Thesis, University of Washington*, 2016; and <https://www.bls.gov/news.release/pdf/wkyeng.pdf> - Usual Weekly Earnings of Wage and Salary Workers, Third Quarter 2018 [this page is subject to quarterly updates]
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- <sup>17</sup> <https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/alcohol-use-disorders>
- <sup>18</sup> <https://www.cdc.gov/features/costsofdrinking/index.html> - 2010 National and State Costs of Excessive Alcohol Consumption, *Am Jnl Prev Med*, November 2015; 49(5):e73–e79 - [healthcare = 11% x 807 = 89; productivity = 72% x 807 = 581]
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- <sup>20</sup> <http://care.diabetesjournals.org/content/37/12/3172> - The Economic Burden of Elevated Blood Glucose Levels in 2012: Diagnosed and Undiagnosed Diabetes, Gestational Diabetes Mellitus, and Prediabetes, *Diabetes Care* 2014 Dec; 37(12): 3172-3179
- <sup>21</sup> <https://www.niddk.nih.gov/health-information/health-statistics/diabetes-statistics>