



Overweight & Obesity

[Overweight & Obesity Home](#)

Consequences of Obesity

People who have obesity, compared to those with a healthy weight, are at increased risk for many serious diseases and health conditions. In addition, obesity and its associated health problems have a significant economic impact on the US health care system. Obesity also affects military readiness.

Health Conditions

Obesity in children and adults increases the risk for the following health conditions.^{1,2,3}

- High blood pressure and high cholesterol which are risk factors for heart disease.
- Type 2 diabetes.
- Breathing problems, such as asthma and sleep apnea.
- Joint problems such as osteoarthritis and musculoskeletal discomfort.
- Gallstones and gallbladder disease.

Childhood obesity is also associated with:^{4,5,6}

- Psychological problems such as anxiety and depression.
- Low self-esteem and lower self-reported quality of life.
- Social problems such as bullying and stigma.
- Obesity as adults.


Adults with obesity have higher risks for stroke, [many types of cancer](#), premature death, and mental illness such as clinical depression and anxiety.^{7,8}

Economic Impact

Annual obesity-related medical care costs in the United States, in 2019 dollars, were estimated to be nearly \$173 billion.⁹ Annual nationwide productivity costs of obesity-related absenteeism range between \$3.38 billion (\$79 per individual with obesity) and \$6.38 billion (\$132 per individual with obesity).¹⁰





Direct medical costs may include preventive, diagnostic, and treatment services. Indirect costs relate to sickness and death and include lost productivity. Productivity measures include employees being absent from work for obesity-related health reasons, decreased productivity while at work, and premature death and disability¹¹

Military Readiness

Just over 1 in 3 young adults aged 17-24 is too heavy to serve in the [US military](#)  [\[PDF-774KB\]](#). Among the young adults who meet weight requirements, only 3 in 4 report physical activity levels that prepare them for challenges in basic training. Consequently, only 2 in 5 young adults are both weight-eligible and adequately active for military service.

Also, 19% of active-duty service members had obesity in 2020, up from 16% in 2015. These individuals are less likely to be medically ready to deploy. Between 2008 and 2017, active-duty soldiers had more than 3.6 million musculoskeletal injuries. One study found that active-duty soldiers with obesity were 33% more likely to get this type of injury.

References

1. NHLBI. 2013. [Managing Overweight and Obesity in Adults: Systematic Evidence Review from the Obesity Expert Panel.](#)  
2. [Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults.](#)  
3. Bhaskaran K, Douglas I, Forbes H, dos-Santos-Silva I, Leon DA, Smeeth L. Body-mass index and risk of 22 specific cancers: a population-based cohort study of 5.24 million UK adults. *Lancet*. 2014 Aug 30;384(9945):755-65.
4. Morrison KM, Shin S, Tarnopolsky M, et al. Association of depression and health related quality of life with body composition in children and youth with obesity. *Journal of Affective Disorders* 2015;172:18–23.
5. Halfon N, Kandyce L, Slusser W. Associations between obesity and comorbid mental health, developmental, and physical health conditions in a nationally representative sample of US children aged 10 to 17. *Academic Pediatrics*. 2013;13.1:6–13.
6. Beck AR. Psychosocial aspects of obesity. *NASN Sch Nurse*. 2016;31(1):23–27.
7. Kasen, Stephanie, et al. "Obesity and psychopathology in women: a three decade prospective study." *International Journal of Obesity* 32.3 (2008): 558-566.
8. Luppino, Floriana S., et al. "Overweight, obesity, and depression: a systematic review and meta-analysis of longitudinal studies." *Archives of general psychiatry* 67.3 (2010): 220-229.
9. Ward ZJ, Bleich SN, Long MW, Gortmaker SL (2021) Association of body mass index with health care expenditures in the United States by age and sex. *PLoS ONE* 16(3): e0247307. <https://doi.org/10.1371/journal.pone.0247307>
10. Trogdon JG, Finkelstein EA, Hylands T, Dellea PS, Kamal-Bahl. Indirect costs of obesity: a review of the current literature. *Obes Rev*.2008;9(5):489–500.
11. Hammond RA, Levine R. The economic impact of obesity in the United States. *Diabetes, metabolic syndrome and obesity: targets and therapy*. 2010;3:285-295.