The indirect cost of obesity

A quick look at absenteeism, presenteeism, and more

ABSENTEEISM

Obesity may cause employees to miss more work days^{1,a}

According to 1 study using 2006-2008 survey data,1

employees with BMI=40 kg/m² will miss 77% more work days^b

compared with employees with BMI=25 kg/m² obesity-related absenteeism can cost employers **\$12.8 billion** annually

^aCross-sectional analysis of N=29,699 US employees. Sample population based on data taken from 3 large employer databases between 2006 to 2008.⁵ ^bDue to sick days, short-term disability, and workers' compensation days.

PRESENTEEISM

Obesity is associated with increased presenteeism in employees²

Presenteeism is the average amount of time between arriving at work and starting work on days when an employee is not feeling well, and the average frequency with which an employee engages in 5 specific behaviors²:

- Losing concentration
- Repeating a job
- Working more slowly than usual

- Feeling fatigued at work
- Doing nothing at work

Days of presenteeism per year²:

22.7 for women with BMI ≥40 kg/m²

Potential cost of obesity-related presenteeism²:

for men with BMI \geq 40 kg/m²

\$391

per male worker with BMI 30 to 34.9 kg/m²

\$843 per female v with BMI 30

per female worker with BMI 30 to 34.9 kg/m²

Presenteeism in the workplace has been shown to be the single largest cost driver associated with obesity, regardless of BMI^{2,c}

^cAccording to a 2010 costs analysis study.





One study showed a 70% difference in short-term disability days between employees with and without obesity^{3,a}



^aThis statistic is based on a study with 3 cohorts of employee health appraisal data: BMI <27 kg/m², 27 kg/m², and BMI \geq 30 kg/m².³ ^bAnalyzed from total employee-related adjusted annual health benefit costs.

WORKERS' COMPENSATION

Workers with obesity may file more workers' compensation claims⁴

Employees of normal BMI filed **5.80** workers' compensation claims^c

Employees with class III obesity (BMI ≥40 kg/m²) filed **11.65** workers' compensation claims^c

$\sim 64\%$ of injured workers were classified as obese (BMI ≥30 kg/m²) in a 3-year study of aluminum manufacturer employees^{5,d}

^c Per 100 full-time employees.⁴

^d 28% of injuries occurred in employees of normal BMI (BMI 18.5-24.9 kg/m²), over 28% in employees classified as overweight (BMI 25.0-29.9 kg/m²), 30% among workers in obesity classes I and II (BMI 30.0-39.9 kg/m²), and almost 34% in obesity class III (BMI \geq 40 kg/m²).⁵

Take a look at your data to see how obesity affects your organization. Visit **NovoNordiskWorks.com** to learn more

References: 1. Van Nuys K, Globe D, Ng-Mak D, Cheung H, Sullivan J, Goldman D. The association between employee obesity and employer costs: evidence from a panel of U.S. employers. *Am J Health Promot.* 2014;28(5):277-285. **2.** Finkelstein EA, DiBonaventura MD, Burgess SM, Hale BC. The costs of obesity in the workplace. *J Occup Environ Med.* 2010;52(10):971-976. **3.** Kleinman N, Abouzaid S, Andersen L, Wang Z, Powers A. Cohort analysis assessing medical and nonmedical cost associated with obesity in the workplace. *J Occup Environ Med.* 2014;56(2):161-170. **4.** Ostbye T, Dement JM, Krause KM. Obesity and workers' compensation. *Arch Intern Med.* 2007;167(8):766-773. **5.** Pollack KM, Sorock GS, Slade MD, et al. Association between body mass index and acute traumatic workplace injury in hourly manufacturing employees. *Am J Epidemiol.* 2007;166(2):204-211.



