This study examined the relationship between physical activity and health care costs by different weight groups. The study sample consisted of 23,490 active employees grouped into normal weight, overweight, and obese categories. After adjustment for covariates, physically moderately active (1 to 2 times/week) and very active (3 + times/week) employees had approximately $250 less paid health care costs annually than sedentary employees (0 time/week) across all weight categories. The difference was approximately $450 in the obese subpopulation. The maximum possible savings was estimated to be 1.5% of the total health care costs if all obese sedentary employees would adapt a physically active lifestyle. As a strategy to control escalating health care costs, wellness programs should facilitate engagement in moderate physical activity of at least 1 to 2 times a week among sedentary obese people and help them to maintain this more active lifestyle.)