

Age and Body Mass Index in Industry

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In 2006, I wrote a paper called “Solving a Weighty Problem: Companies can combat the rising costs of obesity in the workplace.” The good news is that many companies are now acknowledging that obesity in the workplace not only exists—it must be addressed. Companies are designing innovative incentive programs to reward those who choose to lead a healthy lifestyle.

One of the biggest concerns currently facing industry is the impact obesity is having on its workforce, selection process, and long-term benefit costs.

- What impact does age have on the prevalence of obesity?
- What impact will age have on long-term planning for obesity-related healthcare claims?

The reported research presented over the last twelve months continues to demonstrate that obesity is still on the rise—a trend that will continue for many years to come. A recent study by Wang, et al, that appeared in the *Epidemiological Reviews* in May 2007 predicts that by the year 2015, 75 percent of the adult population in the United States will be overweight or obese and that 41 percent will be obese.

A recent analysis of the Industrial Physical Capability Services, Inc., (IPCS) database (117,000 workers) showed that in 2001, 32 percent of the new hire applicants were obese (BMI 30.0 or greater), and in the year 2006, that number jumped to 38 percent.

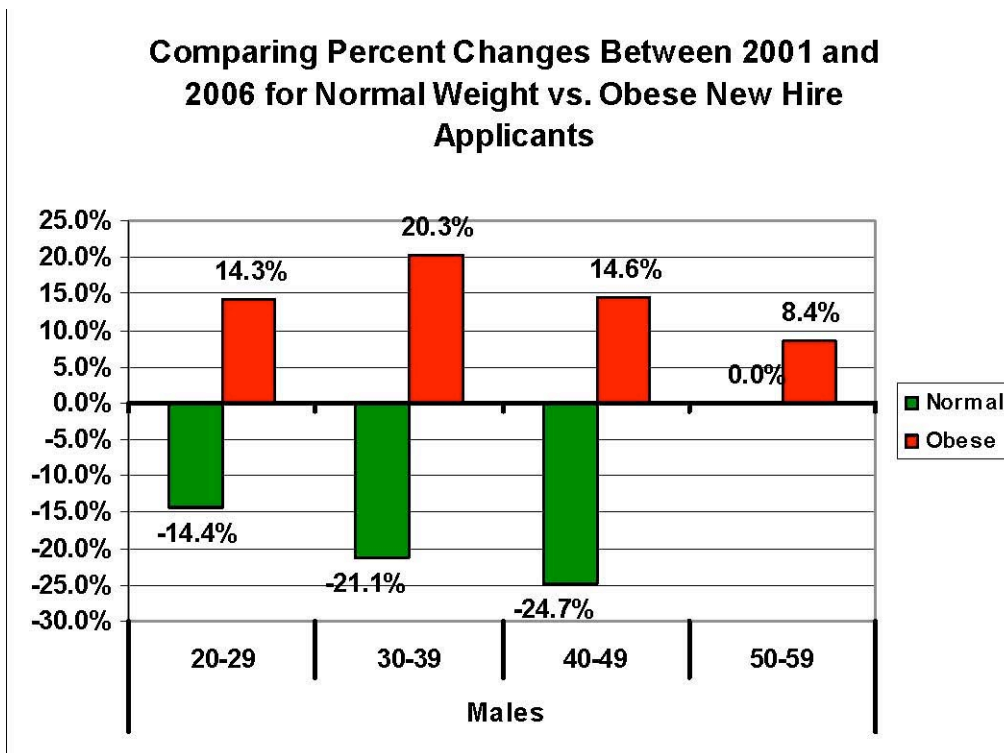
- The relative increase between 2001 and 2006 was 16 percent.

If this increase duplicates itself over the next six years, more than 43 percent of the industrial new hire applicants will be obese by the year 2012, a number very close to what Wang’s study suggests. The unique component of the IPCS database is that the data is obtained from new hire applicants and represents workers applying for physically demanding jobs in a variety of industries.

A further analysis of this data by age and gender shows that between 2001 and 2006 for each decade, beginning at age 20, there has been a *decrease* in the percentage of normal weight male workers (BMI 18.5-24.9) and an *increase* in the percentage of obese (BMI 30.0 or greater) male workers.

- Chart 1 shows the greatest increase in the proportion of obese workers occurred within the 30-39 age group.
 - For this age group, there was a 21 percent decrease in the number of applicants who fall into the normal weight group and a 20 percent increase in the obesity group.
- It is surprising to note that there was an increase of 14 percent in obesity for those applicants in the 20-29 age group.
- The smallest increase in obesity occurred for the oldest age group—50-59 years. This group showed an 8 percent increase in obesity with no change for those who fall into the category of normal weight.

Chart 1

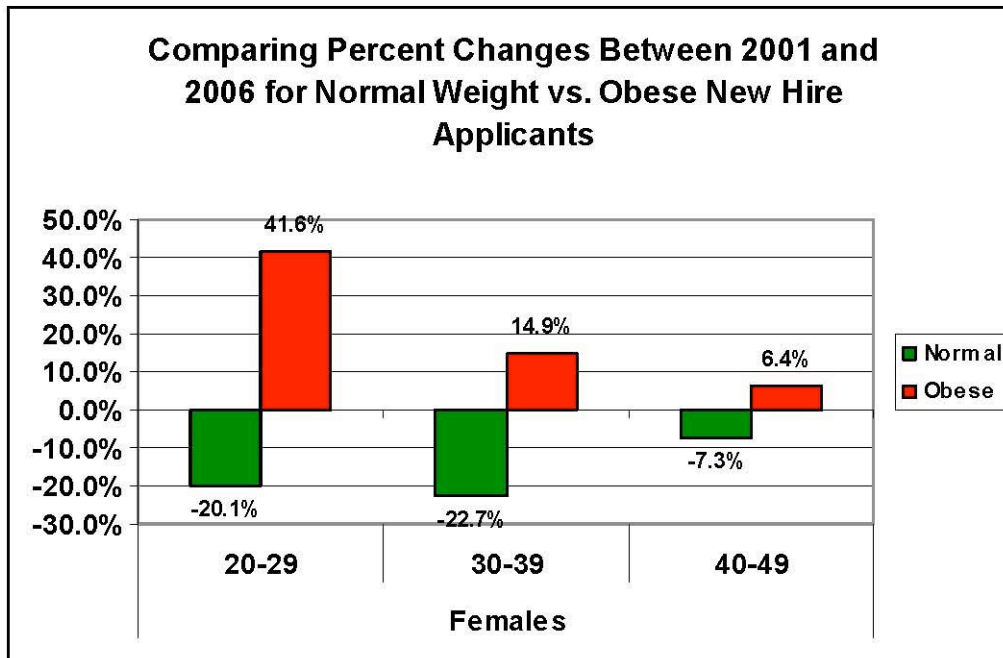


The data is slightly different for the female new hire applicant (Chart 2).

- The largest increase in the proportion of obese new hire applicants occurred for the youngest age group—a 42 percent increase with a 20 percent decrease in workers with a normal weight.
- The oldest age group (40-49 years) showed the smallest change in the number of normal weight and obese workers.

- Since the sample size for the female age category of greater than 50 years was small, it was not possible to perform any statistics on that age group.

Chart 2



In summary, the body mass index data for the industrial worker is disturbing, since it shows an increase in the prevalence of obesity with the younger workforce, especially in the 20-29 and 30-39 age groups for both males and females in 2006 that was not present in 2001.

- The data shows that the younger workers are gaining weight faster and becoming obese faster than the older workers.
- These trends are exactly opposite from what most benefit specialists and actuaries use when planning long-term healthcare costs.

The availability of healthy and fit workers needed to fill physically demanding jobs is diminishing. One can speculate only that this will negatively impact a company's selection process over time. Further, the long-term economic impact in terms of claims paid over a longer period of time could significantly impact a company's margin of profits and its ability to maintain a level of production critical to remaining competitive.

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