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Center for Business and Economic Research

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## Health & Wellness in the Business Context

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CENTER FOR BUSINESS AND ECONOMIC RESEARCH

**ISSUE BRIEF**

on topics affecting Kentucky's economy

OCTOBER 2011  
No. 2

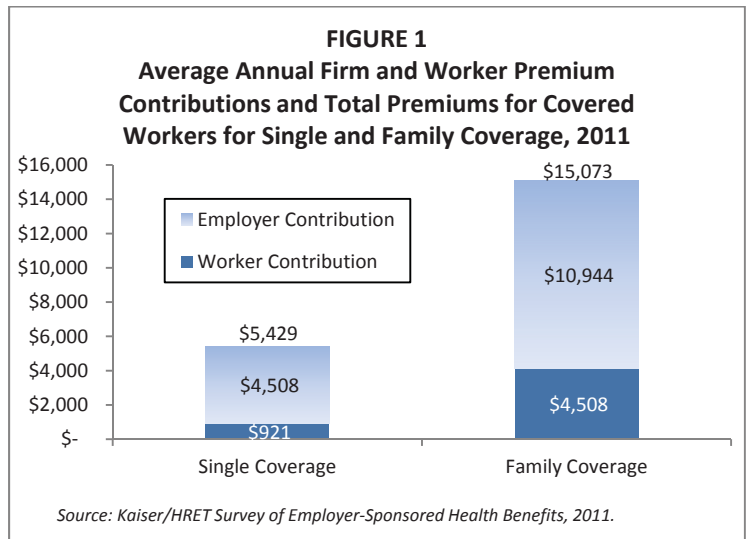
**Health & Wellness in the Business Context**

By Michael Childress (michael.childress@uky.edu)

More organizations and firms are turning to wellness programs to improve health and contain costs.

An estimated sixty percent of U.S. firms offer health benefits to their workers, with average annual premiums for employer-sponsored health insurance costing \$5,429 for single coverage and \$15,073 for family coverage (Figure 1).<sup>1</sup> Compared to 2010, premiums for single coverage are 8 percent higher while family coverage is 9 percent higher.<sup>2</sup> At two-and-a-half times the OECD average, the U.S. spends more on health

care than any other industrialized country, leading some to conclude that expanding health care costs are hurting U.S. global competitiveness.<sup>3</sup> As health care costs continue to increase, so does interest in workplace wellness programs to improve health and contain costs. Common characteristics of wellness programs include weight loss programs, gym membership discounts or on-site exercise facilities, smoking cessation programs, personal health coaching, classes in nutrition or healthy living, web-based resources for healthy living, or a wellness newsletter.<sup>4</sup> States are responding with legislation to encourage wider adoption of health and wellness programs.<sup>5</sup> Research indicates that wellness programs are generally



cost-effective, with medical costs falling about \$3.27 and absenteeism cost falling around \$2.73 for every dollar spent.<sup>6</sup> However, more research is necessary to determine if these returns on investment are applicable across a broad spectrum of firms.

Research indicates that wellness programs are cost-effective.

According to the Centers for Disease Control and Prevention (CDC), more than 75 percent of health care costs are due to chronic conditions such as heart disease, cancer, stroke, diabetes, and arthritis.<sup>7</sup> Many patients have multiple chronic conditions and their care costs up to seven times as much as those with one chronic condition.<sup>8</sup> Much of the chronic disease is caused by four preventable health risk behaviors—lack of exercise, poor nutrition, smoking, and heavy alcohol consumption.<sup>9</sup> When compared to the U.S. as well as states that are widely considered to be Kentucky's competitors for economic development prospects,<sup>10</sup> Kentuckians are more likely to smoke, be obese, and not engage in regular physical activity—but are

**TABLE 1**  
**Four Risk Behaviors that Contribute to Chronic Disease, U.S., Competitive States, and Kentucky, 2008-2010**

Adults, 18 and Older	US (%)	CS (%)	KY (%)
Current Smoker	17.9*	20.1*	25.2
Obese	27.3*	29.1*	31.5
Lack of Physical Activity	24.6*	26.3*	29.8
Heavy Alcohol Consumption	5.1*	4.7	4.3

Source: Authors' analysis of data from Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2008-2010  
Note: The competitive states are AL, AR, FL, GA, IL, IN, LA, MI, MO, MS, NC, OH, SC, TN, VA, & WV.  
\*These percentages are statistically different from the Kentucky percentages (alpha=.05).

slightly less likely to be heavy drinkers (see Table 1). Over 62 percent of Kentuckians demonstrate at least one of these four behaviors that put them at risk of developing a chronic disease, compared to 57 percent for the competitive states and 54 percent for the United States (see Figure 2).<sup>11</sup>

Chronic disease drives most health care costs and is generally preventable.



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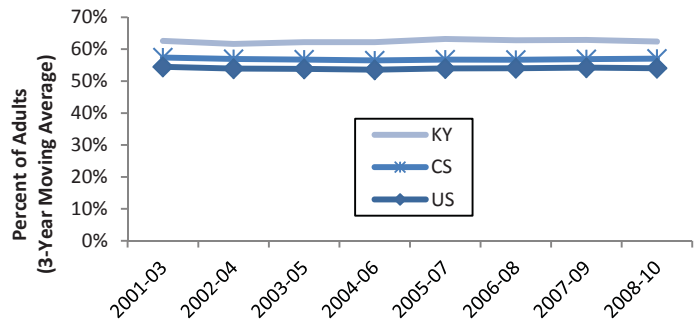
*An increasing number of organizations and firms are adopting wellness programs.*

*Rigorous program evaluation is necessary to determine the cost-effectiveness of wellness programs.*

Increasingly firms are adopting wellness programs to facilitate healthy lifestyles among their employees. In Kentucky, where nearly one-quarter of adults exhibit multiple chronic disease causing behaviors (see Figure 3), health and wellness programs among organizations increased from 34% in 2007 to 63% in 2010.<sup>12</sup> According to one recent survey, among firms offering health benefits and wellness programs, 65% report these programs are effective in improving the health of their employees and 53% believe wellness programs are effective in reducing their firm's health care costs.<sup>13</sup>

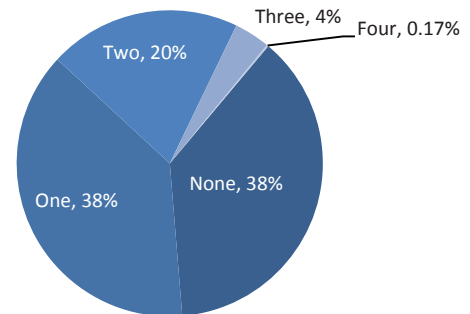
Driven by persistently high smoking, growing obesity, physical inactivity, and increased alcohol consumption,<sup>14</sup> Kentucky faces many health challenges. Research suggests that wellness programs offer the potential to improve the health of citizens as well as the bottom lines of businesses—especially when wellness programs are embedded within an organizational culture that promotes overall health and well-being.<sup>15</sup> However, there are important unanswered questions, such as whether the returns on investment experienced by large firms are applicable to small firms, what conditions affect how long it takes to recoup the benefits, and which facets of wellness programs are most important.<sup>16</sup> While important case studies on Kentucky organizations have revealed promising practices for implementing effective wellness programs,<sup>17</sup> rigorous program evaluation is necessary to determine their cost-effectiveness across a range of program dimensions and characteristics.

**FIGURE 2**  
**At Risk for Chronic Disease,\***  
**US, KY, and Competitive States (CS), 2001-2010**



\*Demonstrates at least one of the at-risk behaviors for developing chronic disease: smoking, obesity, physical inactivity, or heavy alcohol consumption.  
Source: Author's analysis of Behavioral Risk Factor Surveillance System data

**FIGURE 3**  
**Percent of Kentucky Adults by Number of Chronic Disease Risk Behaviors, 2008-2010**

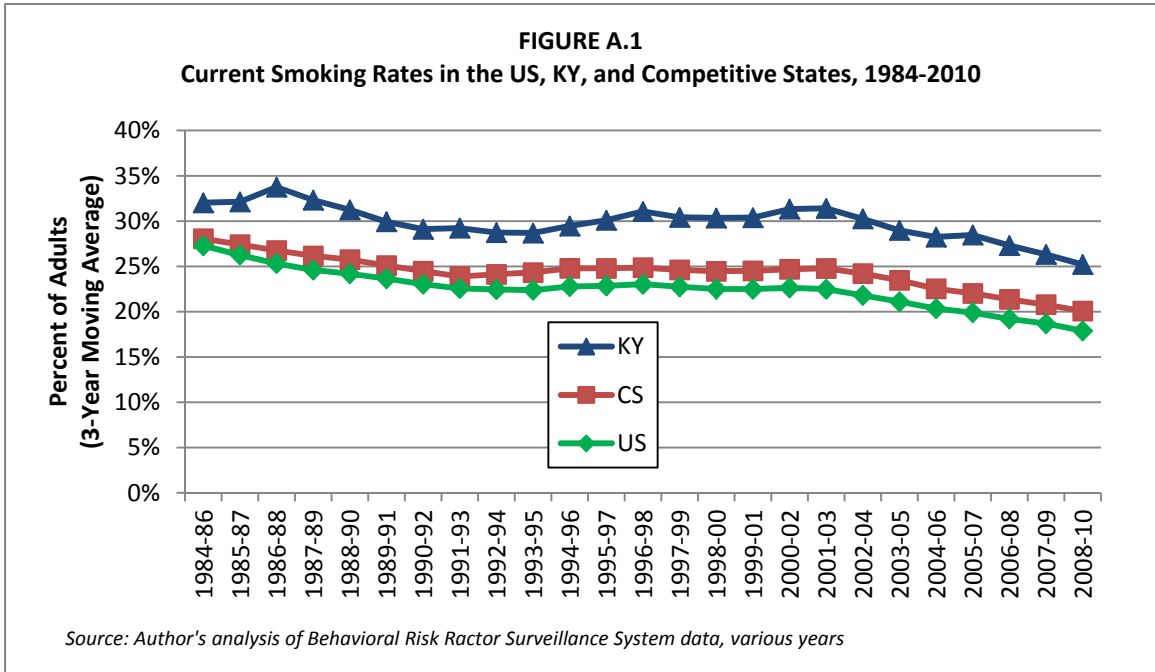


Source: Author's analysis of Behavioral Risk Factor Surveillance System data

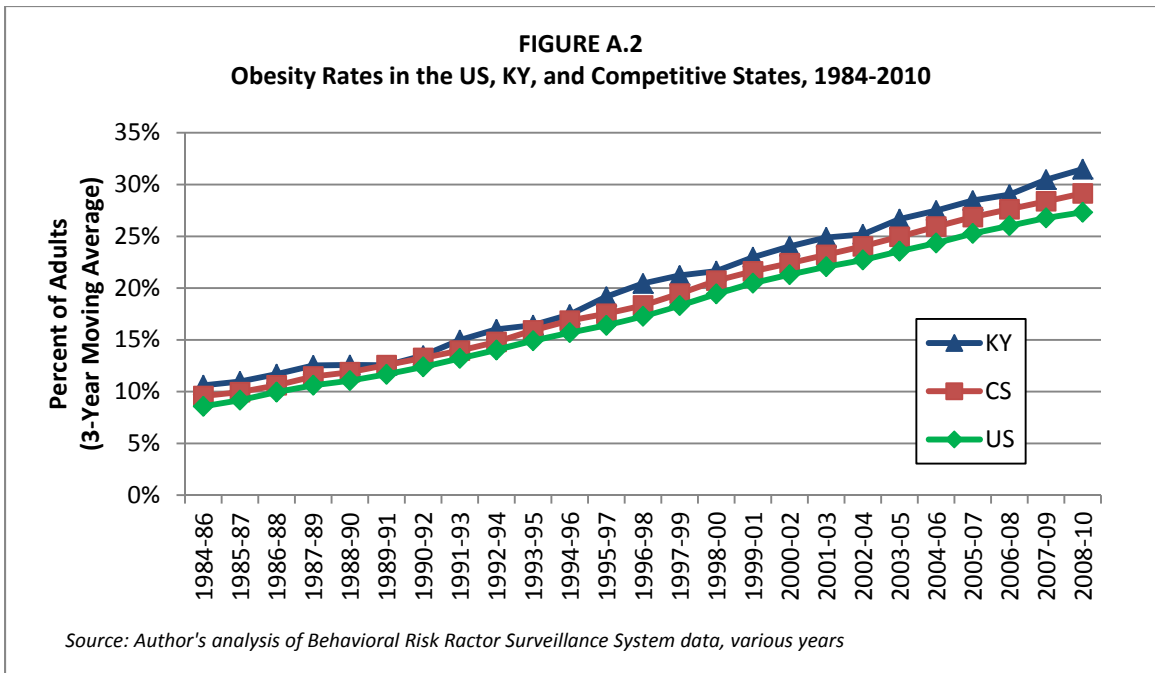
**Notes**

<sup>1</sup>Employer Health Benefits, 2011 Summary of Findings, Kaiser Family Foundation/Health Research & Educational Trust, September 2011, online <<http://ehbs.kff.org/pdf/8226.pdf>>.  
<sup>2</sup>Ibid.  
<sup>3</sup>Toni Johnson, "Healthcare Costs and U.S. Competitiveness," Council on Foreign Relations, March 23, 2010, online at <[www.cfr.org](http://www.cfr.org)>.  
<sup>4</sup>Employer Health Benefits, 2011 Annual Survey, Kaiser Family Foundation/Health Research & Educational Trust, September 2011, online <<http://ehbs.kff.org>>, p. 189.  
<sup>5</sup>State Wellness Legislation, 2006-2010, National Conference of State Legislatures, July 2010, online <<http://www.ncsl.org/?TabId=13826>>.  
<sup>6</sup>Katherine Baicker, David Cutler, and Zirui Song, "Workplace Wellness Programs Can Generate Savings," *Health Affairs* 29, No. 2 (2010).  
<sup>7</sup>Chronic Disease, Centers for Disease Control and Prevention (CDC), online <<http://www.cdc.gov/chronicdisease/resources/publications/AAG/chronic.htm>>.  
<sup>8</sup>Mark W. Stanton, *The High Concentration of U.S. Health Care Expenditures*, Agency for Healthcare Research and Quality (AHRQ), Issue 19 (June 2006), online <<http://www.ahrq.gov/research/ria19/expendia.htm>>.  
<sup>9</sup>CDC, online <<http://www.cdc.gov/Features/LiveLonger/?source=govdelivery>>. Also see Ford ES, Zhao G, Tsai J, Li C. "Low-risk lifestyle behaviors and all-cause mortality: Findings from the National Health and Nutrition Examination Survey III Mortality Study," *American Journal of Public Health*, published online ahead of print August 18, 2011.  
<sup>10</sup>The competitive states are AL, AR, FL, GA, IL, IN, LA, MI, MO, MS, NC, OH, SC, TN, VA, & WV.  
<sup>11</sup>Kentucky's estimate is statistically different from the competitive states and the U.S. (p<.05).  
<sup>12</sup>Jennifer Swanberg, et al., *Creating Healthy Organizations: Promising Practices in Kentucky*, University of Kentucky Institute for Workplace Innovations, October 2011, p. 8.  
<sup>13</sup>Employer Health Benefits, 2011 Annual Survey, p. 190-1.  
<sup>14</sup>See the appendix for graphs.  
<sup>15</sup>Swanberg, et al., *Creating Healthy Organizations*.  
<sup>16</sup>Baicker, et al., "Workplace Wellness Programs Can Generate Savings," pp. 5-7.  
<sup>17</sup>Swanberg, et al., *Creating Healthy Organizations*.

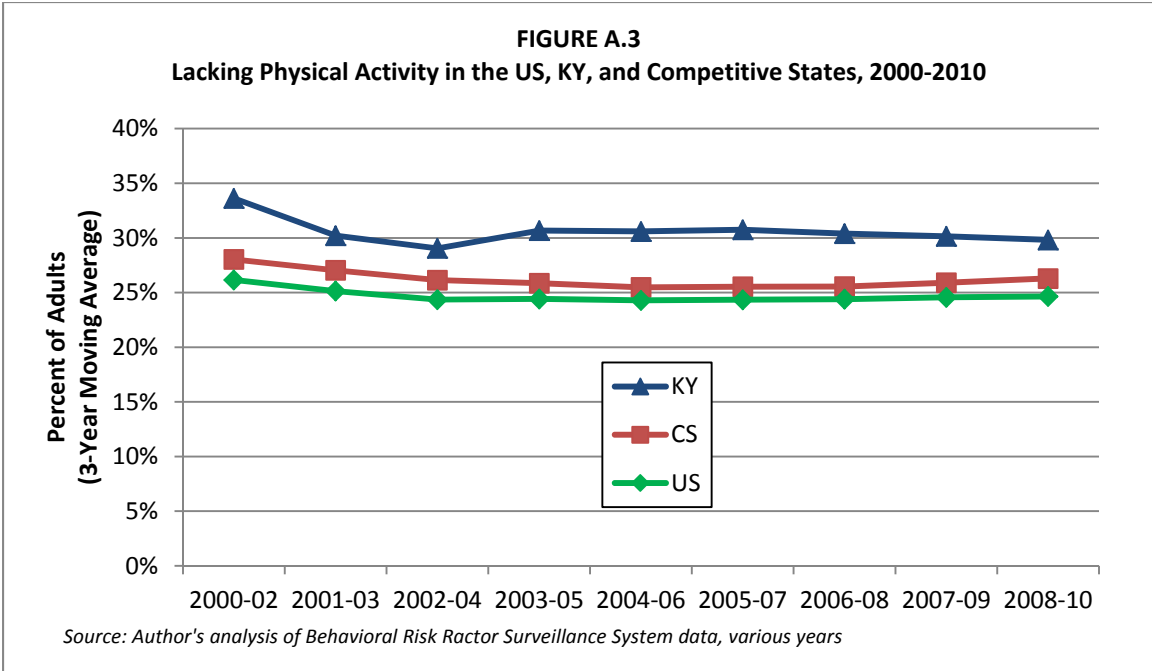
# Appendix Issue Brief No. 2 “Health & Wellness in the Business Context”



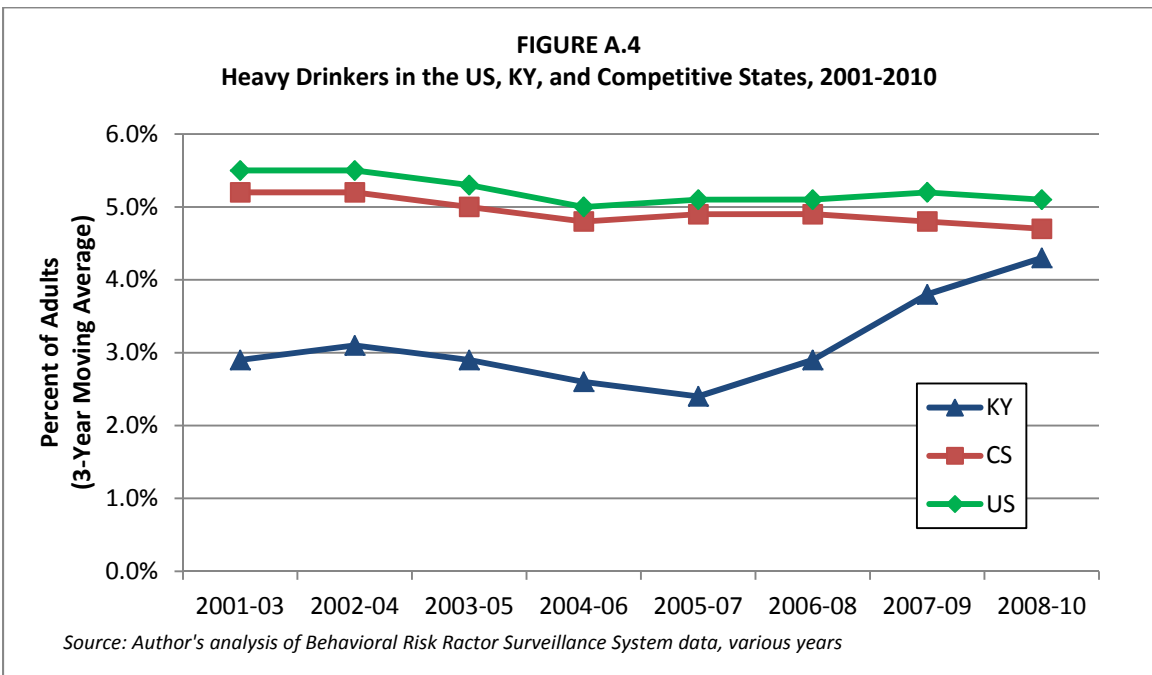
- CDC BRFSS calculated variable that defines a “current smoker” (2010 BRFSS: `_SMOKER3`)



- CDC BRFSS calculated variable that defines “obesity” (2010 BRFSS: `_BMI4CAT`)



- During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? (2010 BRFSS: EXERANY2)



- CDC BRFSS calculated variable that defines “heavy alcohol consumption” — Heavy drinkers (adult men having more than two drinks per day and adult women having more than one drink per day) (2010 BRFSS: \_RFDRHV3)