

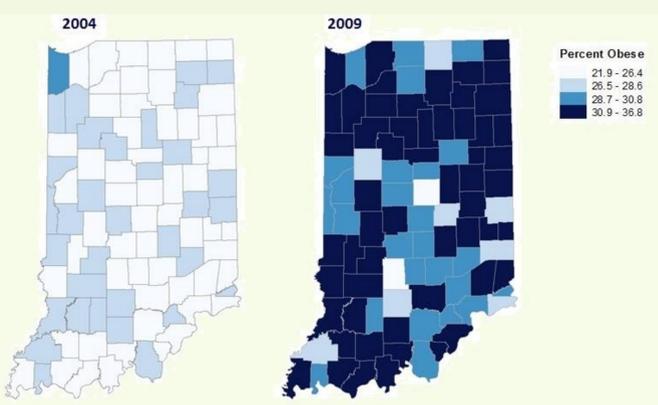
The Burden of Obesity Related Cancers and the Promotion of Physical Activity in Indiana

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Background

It is estimated one-quarter to one-third of new cancer cases will be related to overweight or obesity, physical inactivity and poor nutrition. Over the past three decades, the adult obesity rate has doubled and about 65 percent of adults (Figure 1) and 31 percent of youth in Indiana are considered overweight or obese. In addition, a majority of Indiana adults and adolescents do not meet the recommended levels of physical activity. Policy, systems and environmental (PSE) change strategies can be effective interventions to promote physical activity, reduce obesity and reduce the burden of cancer.

Figure 1. Percent Obese Adults (Age 20+), by County of Residence in Indiana, 2004 and 2009*



*Centers for Disease Control and Prevention: National Diabetes Surveillance System. Available online at: <http://www.cdc.gov/diabetes/statistics>. Retrieved 06/27/2013.

Objectives

The Cancer Control Section developed "The Burden of Obesity Related Cancers and the Promotion of Physical Activity in Indiana" to:

- Educate about cancers associated with obesity, the current state of physical activity, overweight and obesity trends in Indiana, and evidence-based strategies to improve physical activity levels.
- Inform decision makers how PSE changes can encourage physical activity, and make the healthy choice the easy choice.
- Determine the extent that obesity related cancers are impacting Indiana's population.

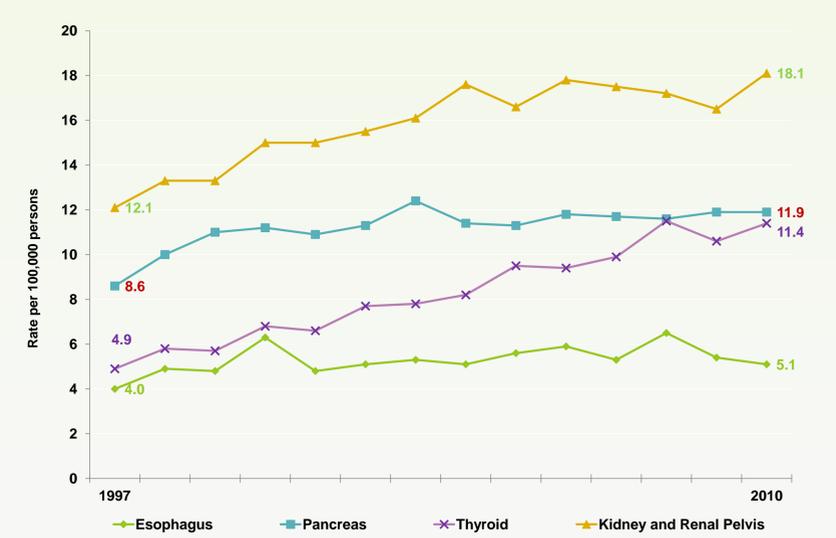
Methods

Indiana State Cancer Registry data was used to produce age-adjusted incidence and mortality rates for those cancers related to overweight and obesity in adults. Changes in rates for gender within race (white and black) and between races and genders for 1997 to 2010 were examined for statistical significance. Statistically significant findings were presented in the report.

Results

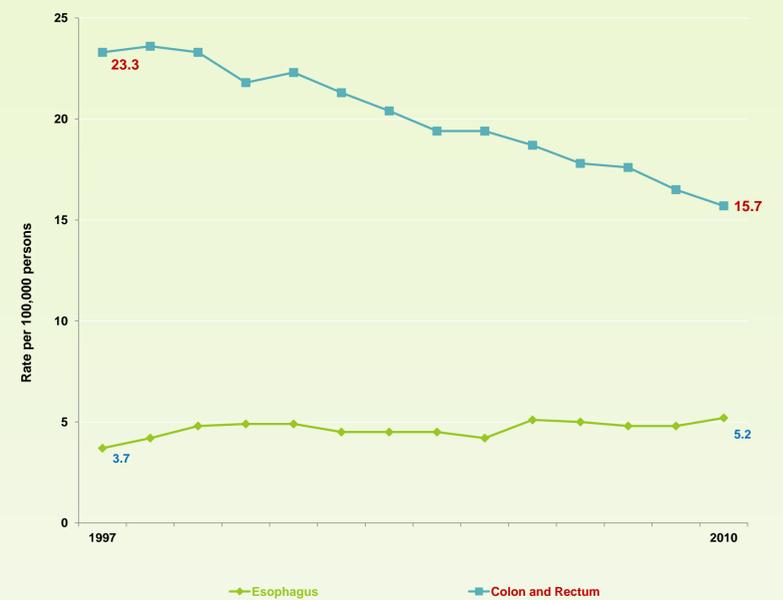
Of the cancers associated with obesity, Indiana incidence rates for four of these cancers have significantly increased from 1997 to 2010 (Figure 2). For the same years, mortality rates significantly decreased for colon and rectum cancer but increased for esophageal cancer (Figure 3).

Figure 2. Incidence Rates of Obesity Related Cancers Having Significant Changes from 1997 to 2011, Indiana



Source: Indiana State Cancer Registry

Figure 3. Mortality Rates of Obesity Related Cancers Having Significant Changes from 1997 to 2011, Indiana



Source: Indiana State Cancer Registry

Discussion

The report found an increase in four cancer rates associated with obesity. This suggests that if overweight and obesity trends continue to increase in Indiana, so will cancers associated with obesity. Physical activity is a critical component of a healthy lifestyle to achieve and maintain a healthy weight. Therefore, it is important Indiana residents work, live and play in environments that support physical activity.

Conclusion

Promoting physical activity is a crucial preventive measure to reverse and stop the rising rates overweight and obesity. The Cancer Control Section (CCS) and Indiana Cancer Consortium (ICC) are implementing a shared policy agenda addressing the low rates of physical activity among children, adolescents and adults through built environment strategies and school-based policy and systems changes. Interventions targeting built environment changes, such as complete streets, are associated with increased levels of physical activity. Schools have direct contact with children for multiple hours a day, and play a significant role in supporting youth to be physically active by allowing time for physical activity. Therefore, the CCS and ICC support policy and systems change to increase time for physical activity in elementary schools. These PSE interventions demonstrate meaningful effects across all groups, regardless of age, race, ethnicity and gender, and play a large role in reducing the burden of cancer in Indiana.

Obesity causes up to 20% of all cancer deaths

Losing 20 pounds reduces cancer risk

Physical Activity helps achieve a healthy weight

References

For a full list of references, please refer to *The Burden of Obesity Related Cancers and the Promotion of Physical Activity in Indiana*.

Acknowledgments

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