## Introduction

The American Cancer Society estimates that approximately 1 out of 2 males and 1 out of 3 females will develop invasive cancer in their lifetime. Cancer is the second leading cause of death in Cuyahoga County and Ohio. One of every 4 males and 1 of every 5 females will die from cancer. Cancer continues to be a priority health issue in Cuyahoga County as every day approximately 21 people were diagnosed with cancer, and 9 people died from cancer between 2005 and 2009. In order to provide a strong scientific base for directed public health interventions in the local setting, it is necessary to continuously examine cancer incidence data and potential risk factors that may contribute to both cancer death and incidence in the local area.

Reduction in Cuyahoga County rates of cancer incidence and death requires a comprehensive, coordinated, and directed public health prevention, control, and education effort by local health professionals, hospitals, service agencies, political leaders, the media, and the state. As the population ages and more advanced cancer diagnostics are utilized, cancer incidence information matched with and against cancer mortality statistics becomes an increasingly important piece of the community health assessment puzzle. Understanding the distribution and diffusion of cancer; prevention and control specialists can make informed decisions and provide appropriate resources and education that is specific to our community. These efforts can be significantly helped by knowing what type of cancer is being diagnosed in whom, at what stage, and where diagnosed individuals live, work, and play in the community. Such a strategy has broad implications for intervention and educational efforts which currently lack information and direction specific to our community.

For example, cancer health disparities, or differences in the numbers of new cases of cancer and cancer deaths can indicate that greater cancer burdens occur for some groups of people versus others. The factors that contribute to these differences are complex and interrelated, but two associated factors are lack of health care coverage and low socioeconomic status. Socioeconomic status is usually based on income, education level, occupation and social status in the community. A low socioeconomic status plays a major role in influencing the prevalence of behavioral risk factors for cancer (i.e. tobacco use, physical inactivity, health status) and in following cancer screening recommendations. Additionally, individuals from medically underserved populations are more likely to be diagnosed with late-stage diseases that might have been treated more effectively if diagnosed earlier. Therefore, addressing why cancer health disparities exist in our community is a potential way to decrease cancer burdens.<sup>2</sup>

The current review of 2005-2009 Cuyahoga County cancer data provides updated statistics for our community that have been compared to Cuyahoga County's 2002-2006 cancer incidence and mortality rates as presented in 2011 Cancer Report. This update also takes a more in-depth look at stage at diagnosis for eight different cancers by geography. Currently, there are only recommended screening guidelines for breast, cervical, and colon cancer; however, there are some potential screening methods available for lung and bronchus, melanoma of the skin, oral cavity and pharynx, prostate, and testicular cancer. Talking with a physician is important in determining individual screening recommendations, as a patient's medical history may play a role in these discussions.

Cancer is a mutlifactorial disease. Behavior choices, like tobacco use, level of physical activity and diet may play a role, in addition to family history/genetics and environmental exposures throughout our lives. It is important to recognize that because of the complex nature of cancer and its causes, along with the limited data available for each case of cancer, it is not possible to address specific causes or reasons for the observed number or rates of cancer, or identify the reasons why cancer rates may be elevated in one community or neighborhood versus another. Additionally, the presentation of this report is not meant to be an environmental assessment of the community.

## **References**

- Lifetime Risk of Developing or Dying From Cancer. The American Cancer Society.
   http://www.cancer.org/Cancer/CancerBasics/lifetime-probability-of-developing-or-dying-from-cancer.
   (Accessed December 11, 2012).
- Cancer Health Disparities. National Cancer Institute. <a href="http://www.cancer.gov/cancertopics/factsheet/disparities/cancer-health-disparities">http://www.cancer.gov/cancertopics/factsheet/disparities/cancer-health-disparities</a> (Accessed February 22, 2013).
- 3. Ohio Cancer Incidence Surveillance System, Ohio Department of Health and The Ohio State University, Columbus, Ohio, March 2006. *Stage at Diagnosis for Selected Cancer Sites & Types in Ohio, 1998-2002.* (Accessed February 23, 2011).