



# CHRONIC DISEASE BURDEN UPDATE

■ This burden update focuses on colorectal cancer in Illinois, and how ArcGIS mapping can be used to target high-risk counties to implement screenings and interventions.

In 2011, an estimated 65,610 Illinois residents learned they have cancer.<sup>1</sup> Cancer is the second most common cause of death in Illinois, but for persons between the ages of 45 and 64, cancer is the leading cause of death.<sup>1</sup> Colorectal cancer makes up 10 percent of all cancer deaths in Illinois for both males and females.<sup>2</sup>

To assess the burden of colorectal cancer in Illinois, the Illinois Department of Public Health, Division of Chronic Disease Prevention and Control, used ArcGIS mapping software to analyze and display the findings (a method that is becoming increasingly more popular as the amount, and quality, of accessible public health data increases). Mapping health data allows data users the ability to organize the excess of health data into easily understood and manageable maps.

Map 1 was created to assess colorectal cancer in Illinois' counties, identify areas with high colorectal cancer incidence and mortality rates, educate the public and stakeholders on the burden of colorectal cancer, plot federally qualified health center (FQHC) locations and assist with future collaborative efforts toward reducing the burden of colorectal cancer. This map will assist the Illinois Cancer Partnership (ICP) and stakeholders identify FQHCs that serve counties with high incidence and/or mortality rates in order to collaborate with the local FQHC in the ICP's efforts to increase colorectal cancer screening and decrease colorectal cancer incidence and mortality.

## CANCER MORTALITY AND INCIDENCE

Colorectal cancer is the third leading cause of cancer death for both men and women.<sup>2</sup> In 2010, colorectal cancer accounted for 2,298 deaths (1,159 men and 1,139 women).<sup>2</sup>

**Table 1.** Male Cancer Mortality: Top 3 Cancer Causes of Death All Races, Illinois, 2010<sup>2</sup>

Sites	Male Count	Male Rate
Lung and Bronchus	3,575	62.14
Prostate	1,171	22.6
Colon and Rectum	1,159	20.13

**Table 2.** Female Cancer Mortality: Top 3 Cancer Causes of Death All Races, Illinois, 2010<sup>2</sup>

Sites	Female Count	Female Rate
Lung and Bronchus	3,096	41.16
Breast, invasive	1,740	22.58
Colon and Rectum	1,139	14.28

Colorectal cancer has the third highest rate per 100,000 population of cancer incidence for both men and women in Illinois (male 54.8; female 39.1).<sup>2</sup> Breast and lung and bronchus cancer have the highest incidence rates for women, while prostate and lung and bronchus are the highest for men.<sup>2</sup>

**Table 3.** Male Cancer Incidence: Top 5 Cancer Incidence All Races, Illinois, 2010<sup>2</sup>

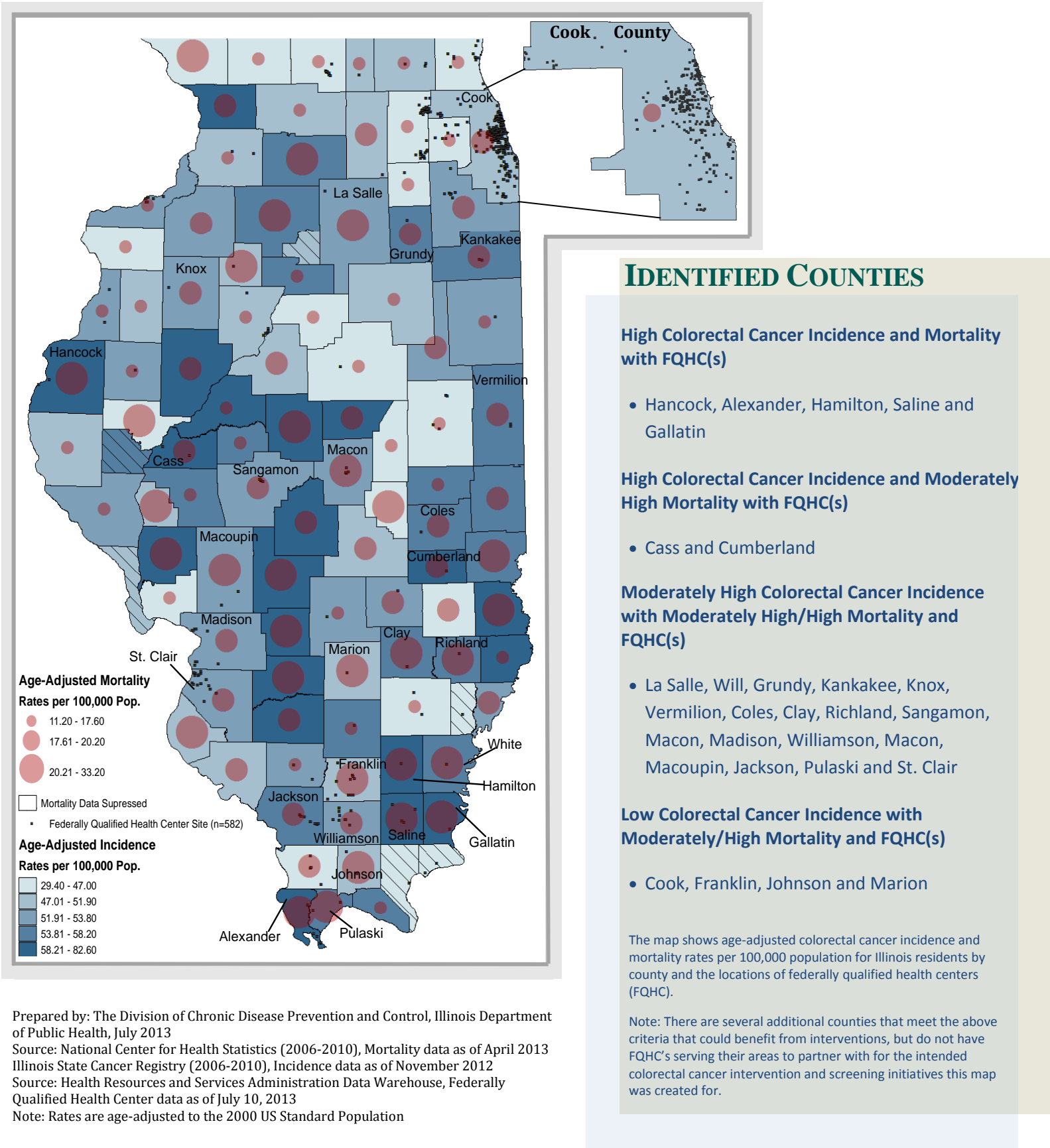
Sites	Male Count	Male Rate
Prostate	8,045	127
Lung and Bronchus	4,657	79.7
Colon and Rectum	3,260	54.8
Bladder	2,132	37.6
Non-Hodgkins Lymphoma	1,437	24.3

**Table 4.** Female Cancer Incidence: Top 5 Cancer Incidence All Races, Illinois, 2010<sup>2</sup>

Sites	Female Count	Female Rate
Breast, invasive	9,197	125.4
Lung and Bronchus	4,364	58.4
Colon and Rectum	2,995	39.1
Corpus and Uterus	2,130	28.2
Non-Hodgkins Lymphoma	1,208	16.3

Source: <sup>1</sup>Cancer Facts and Figures: <http://www.cancer.org/acs/groups/content/@epidemiologysurveillance/documents/document/acspc-029771.pdf>  
Source: <sup>2</sup> Illinois Department of Public Health, Illinois State Cancer Registry

# MAP 1. COLORECTAL CANCER INCIDENCE AND MORTALITY RATES AND FEDERALLY QUALIFIED HEALTH CENTERS, ILLINOIS, 2006-2010



Prepared by: The Division of Chronic Disease Prevention and Control, Illinois Department of Public Health, July 2013

Source: National Center for Health Statistics (2006-2010), Mortality data as of April 2013

Illinois State Cancer Registry (2006-2010), Incidence data as of November 2012

Source: Health Resources and Services Administration Data Warehouse, Federally Qualified Health Center data as of July 10, 2013

Note: Rates are age-adjusted to the 2000 US Standard Population