Obesity is a major cancer risk factor. Obesity-related cancers cause substantial illness and death in NYS.

Obesity is a serious public health issue in New York State (NYS) and a well-recognized risk factor for heart disease, stroke, and type 2 diabetes. Increasing evidence also demonstrates a link between obesity and certain types of cancer. Cancer remains the second leading cause of death and the leading cause of early death (death before age 65) in NYS. At least half of all cancer deaths could be prevented, and it is estimated that up to one-third of all cancers may be attributed to excess weight, unhealthy diet, and physical inactivity.

People who are obese are at greater risk for developing and dying from several types of cancer. Eight cancers are strongly associated with obesity: esophageal cancer (adenocarcinoma), colorectal cancer, gallbladder cancer, pancreatic cancer, kidney cancer, thyroid cancer, and, in women, post-menopausal breast cancer and endometrial cancer. The rise in adult obesity over the past decades has likely contributed to the increase in some of the obesity-related cancers.

- The percentage of adults in NYS who are obese increased almost 40% in 10 years, rising from 17.7% in 2000 to 24.5% in 2010 [Figure 1a].
- Although there was no significant change in adult obesity since 2007, nearly a quarter of adults in NYS are currently obese [Figure 1b].
- Obesity-related cancers account for about a third of the 107,000 cancers diagnosed in NYS annually. About 35,000 New Yorkers are diagnosed with the eight obesity-related cancers every year [Table 1].
- Almost 10,000 New Yorkers die of obesity-related cancers each year. These cancers account for over a quarter of cancer deaths and about seven percent of all deaths in NYS [Table 1].

If the prevalence of obesity were to increase as in the recent past, obesity could exceed cigarette smoking as the leading preventable cause of death in the United States within the next few years. Maintaining a healthy weight throughout the lifespan may be one of the most important ways to prevent cancer. Efforts to reduce obesity in children and adults will help reduce the burden of some of the most frequently occurring cancers.
Table 1. Incidence of and mortality from obesity-related cancers, New York State, 2007-2011

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>Average new cases per year</th>
<th>Incidence (Rate per 100,000)</th>
<th>95% CI (+/-)</th>
<th>Average deaths per year</th>
<th>Mortality (Rate per 100,000)</th>
<th>95% CI (+/-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esophagus (adenocarcinoma)²</td>
<td>614</td>
<td>2.8</td>
<td>0.2</td>
<td>890*</td>
<td>4.1*</td>
<td>0.2</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>9,620</td>
<td>44.9</td>
<td>0.4</td>
<td>3,334</td>
<td>15.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Gallbladder</td>
<td>312</td>
<td>1.5</td>
<td>0.0</td>
<td>175</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Pancreas</td>
<td>2,943</td>
<td>13.7</td>
<td>0.2</td>
<td>2,402</td>
<td>11.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Female breast (post-menopausal)³</td>
<td>11,631</td>
<td>341.1</td>
<td>2.7</td>
<td>2,354</td>
<td>66.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Endometrial (females only)⁴</td>
<td>3,593</td>
<td>30.2</td>
<td>0.4</td>
<td>640</td>
<td>5.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Kidney</td>
<td>3,409</td>
<td>16.0</td>
<td>0.2</td>
<td>712</td>
<td>3.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Thyroid</td>
<td>3,499</td>
<td>17.2</td>
<td>0.2</td>
<td>114</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td>All Obesity-related Cancers</td>
<td>35,007</td>
<td></td>
<td></td>
<td>9,732</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


¹Age adjusted to the 2000 US population (19 age groups), with 95% confidence intervals (CI).
²Adenocarcinoma of the esophagus includes microscopically confirmed histologies 8140-8575.
³Post-menopausal breast cancer includes breast cancers in women ages 50 and older.
⁴Endometrial cancer includes cancers of the corpus uteri and uterus, not otherwise specified.
*Mortality data include all histologies.

Public Health Opportunity – Reducing Obesity in Children and Adults

New York State’s Health Improvement Plan, the Prevention Agenda 2013-2017, sets goals to improve the health of New Yorkers in five priority areas and to reduce health disparities. One priority area is preventing chronic diseases, and a focus area within this priority is reducing obesity in children and adults. Objectives in this focus area call for reducing the percentage of children who are obese and the percentage of adults who are obese by:

1) Creating community environments that promote and support healthy food and beverage choices and physical activity
2) Preventing childhood obesity through early child-care and schools
3) Expanding the role of health care and health service providers and insurers in obesity prevention
4) Expanding the role of public and private employers in obesity prevention

NYS Comprehensive Cancer Control Plan Strategies to Prevent Obesity-Related Cancers

The NYS Comprehensive Cancer Control Plan 2012-2017 includes suggested strategies to promote health and prevent cancers related to obesity and physical inactivity. These include:

- Endorsing policies and initiatives that support health-promoting behaviors, including access to nutritious foods and increasing opportunities for physical activity, especially among populations most at risk or affected by overweight and obesity.
- Promoting voluntary adoption of food procurement and vending guidelines by state agencies, local governments and community-based agencies and their vendors.
- Supporting policies to increase the duration and exclusivity of breastfeeding including those policies recommended by New York’s Medicaid Redesign Team.
- Working with local school districts to ensure compliance with state requirements for physical activity for students and reporting on body mass index.
- Encouraging hospitals that provide labor and delivery services to achieve “Baby-Friendly Hospital” designation.

Contact:

For more information about the data included and their specific implications for action, please send an email to DCDIPIFA@health.ny.gov with IFA # 2015-4 in the subject line.

References: