Urinary Cancers in Montana

Urinary cancers, including cancers of the urinary bladder, kidney and renal pelvis, ureter, prostate, and testis, accounted for over 6,700 new cancer diagnoses (an average of 1,340 per year) among Montana residents from 2012 to 2016. Urinary cancers are among the most common types of cancer with cancers of the prostate, bladder, and kidney accounting for 22% of all cancers diagnosed in Montana from 2012 to 2016 (Table 1).

Urinary cancers are much more common among men than among women (Figure 1). Even among sites that are not sex-specific, bladder and kidney, men had more than twice the rate than that of women in Montana from 2012—2016.

Table 1. Number and percent of new cancer cases among the 10 most common cancers in Montana, 2012—2016.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Site</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female Breast</td>
<td>4,020</td>
<td>14%</td>
</tr>
<tr>
<td>2</td>
<td>Prostate</td>
<td>3,939</td>
<td>13%</td>
</tr>
<tr>
<td>3</td>
<td>Lung</td>
<td>3,671</td>
<td>12%</td>
</tr>
<tr>
<td>4</td>
<td>Colorectal</td>
<td>2,458</td>
<td>8%</td>
</tr>
<tr>
<td>5</td>
<td>Melanoma</td>
<td>1,640</td>
<td>6%</td>
</tr>
<tr>
<td>6</td>
<td>Bladder</td>
<td>1,500</td>
<td>5%</td>
</tr>
<tr>
<td>7</td>
<td>Non-Hodgkin Lymphoma</td>
<td>1,219</td>
<td>4%</td>
</tr>
<tr>
<td>8</td>
<td>Kidney and Renal Pelvis</td>
<td>1,052</td>
<td>4%</td>
</tr>
<tr>
<td>9</td>
<td>Leukemia</td>
<td>988</td>
<td>3%</td>
</tr>
<tr>
<td>10</td>
<td>Uterus</td>
<td>895</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>All new cancers (total)</td>
<td>29,529</td>
<td>100%</td>
</tr>
</tbody>
</table>

Montana Central Tumor Registry

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Prostate Cancer

Prostate cancer is the most common of all the urinary cancers. In fact, prostate cancer is the most common cancer in men, accounting for 25% of new cancers among Montana men. An average of 790 new cases of prostate cancer were diagnosed in Montana each year. From 2007—2014 the incidence rate of prostate cancer in Montana decreased significantly but rates have not continued to decrease since 2014 (Figure 2). At least some of the decrease in prostate cancer incidence is likely due to the changes in prostate cancer screening recommendations. Prostate cancer mortality rates have remained at about 25 deaths per 100,000 men since 2007.

Bladder Cancer

About 300 cases of bladder cancer were diagnosed each year in Montana for a rate of about 23 new cases per 100,000 people. The incidence rate of bladder cancer has not changed significantly since 2007 (Figure 3). The bladder cancer death rate has also remained the same (about 5 deaths per 100,000 people) since 2007.
Kidney and Renal Pelvis Cancer

From 2012 to 2016 there was an average of just over 200 new cases of kidney cancer in Montana each year. The age-adjusted incidence rate of kidney cancer appears to have increased from 2007 to 2016 going from 12.8 new cases per 100,000 people to 16.5 (Figure 4). However this difference is not statistically significant. The mortality rate of kidney cancer has remained between 3 and 4 deaths per 100,000 people since 2007.

Figure 4. Trend in age-adjusted kidney and renal pelvis cancer incidence and mortality rates in Montana, 2007—2016.

Reporting Urinary Cancers to the Montana Central Tumor Registry

Montana Law specifies that cancer cases should be reported to the Montana Central Tumor Registry (MCTR) from hospitals, independent clinical laboratories, and physicians (if the case is not otherwise reported from a hospital or independent lab). Completeness of reporting for urological cancers is very good. MCTR estimates about 100% completeness for kidney, bladder, and prostate cancers. However, about 20% of cases reported solely by an independent laboratory are prostate cancers. This percentage indicates that these are cases that are pathologically diagnosed but the patient may be choosing watchful waiting rather than undergoing surgery or radiation treatment. Data analysis could be enhanced, though, with urologists reporting to include race, tobacco history, alcohol history, occupation and industry, stage of the cancer, tumor markers, treatment done in-office (such as hormone therapy), and reasons for no treatment. These are variables that are often analyzed in the MCTR especially if there are reports of increased incidence or potential cluster investigations.

For more information about reporting to the MCTR, please contact Debbi Lemons at dlemons@mt.gov or (406) 444-6786 or visit our webpage:

http://www.dphhs.mt.gov/publichealth/cancer/tumorregistry
Contact the Montana Central Tumor Registry

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Reporting from Urologists would improve MCTR data quality

20% of cases reported only by independent labs are prostate cancer cases. These cases are missing many important variables.

Physicians must report cancer cases when:

- The cancer is diagnosed or treated in your practice
- The patient did not receive any cancer care at an in-state hospital

AND

- Tissue samples were not submitted to an independent pathology lab