Cancer Incidence and Mortality Facts, 2011
DC Cancer Registry
Introduction

• DC Cancer Registry is a population-based cancer surveillance system that maintains a record of the occurrence of all malignant cancer cases, and certain reportable benign conditions within the District.

• National collection of cancer surveillance data has been Congressionally mandated since 1951. Approximately 9,000 new cases are added annually, of these approximately 3,000 (1/3) are DC residents.

• Reference Date is January 1, 1996
  • This date indicates that all cancer cases either diagnosed or treated after this date are reportable and maintained in the DC Cancer Registry.
Cancer Registry Data

- Local, state and national cancer agencies use registry data in defined areas to make important public health decisions that maximize the effectiveness of limited public health funds, such as the placement of screening programs.

- Currently we have approximately 250,000 abstracts in DC Cancer Registry.

- What information is maintained in the cancer registry?
  - Demographics
  - Medical History
  - Diagnostic Findings
  - Cancer Information
  - Treatment
  - Follow-up
Cancer Registries National standards producing Cancer data

- Hospitals are required to report cancer cases within 6 months of first contact for diagnosis or treatment.
- Central Cancer Registries consolidate cancer cases from several sources (hospitals, laboratories, etc.).
- Central Cancer Registries edit cancer cases, link cancer cases with deaths from death documents from their state’s Vital Records, exchange cancer cases with other states and geocode cancer cases.
- Central Cancer Registries submit cancer cases to CDC/NPCR (Centers for Disease Control and Prevention/National Program of Cancer Registries) and NAACCR (North American Association of Central Cancer Registries) in accordance to National Standards. This submission is performed two years after diagnosis, to allow time for completion first course of cancer therapy modalities and for consolidations (Example in November 2015 all 2013 cancer data must be reported to CDC and NAACCR).
- Central Cancer Registries produce counts, rates, tables, graphics, maps, etc., 3 years after the cases were diagnosed, at the same time that CDC, NAACCR and ACS (American Cancer Society) publish national cancer data for the same diagnosis year.
Incidence: Trends by selected cancer sites
(2000-2011)
Mortality: Trends by selected cancer sites (2000-2011)
The most frequent Cancer Sites represent 55% of all Cancer Cases.
Distribution of the most frequent cancer deaths

Mortality 2011 - Percentages

The most frequent Cancer sites represent 49% of all cancer deaths.
Incidence: Ward distribution by selected cancer sites, 2011

Age Adjusted Rate

Ward 8
Ward 7
Ward 6
Ward 5
Ward 4
Ward 3
Ward 2
Ward 1
DC

Prostate  Lung and Bronchus  Colorectal  Breast

0  50  100  150  200  250
Mortality: Ward distribution by selected cancer sites, 2011

Age Adjusted Rate

Ward 8
Ward 7
Ward 6
Ward 5
Ward 4
Ward 3
Ward 2
Ward 1
DC

Prostate   Lung and Bronchus   Colorectal   Breast
Incidence: Age distribution by selected cancer sites, 2011 - Percentages
Mortality: Age distribution by selected cancer sites, 2011 - Percentages

Age distribution by selected cancer sites, 2011 - Percentages

- Colorectal
- Lung and Bronchus
- Breast
- Prostate
Incidence: Stage distribution by selected cancer sites, 2011 - Percentages

Cancer Site: Prostate, Breast, Lung and Bronchus, Colorectal

- In Situ
- Local
- Regional
- Distant
- Unstage
Incidence: Stage distribution by selected cancer sites, 2011 - Percentages

- **Colorectal**
- **Lung and Bronchus**
- **Breast**
- **Prostate**
Colorectal Incidence: Stage distribution by race, 2011 - Percentages

63% of Colorectal Cancer are diagnosed at Local and Regional Stage
Lung and Bronchus Incidence: Stage distribution by race, 2011 - Percentages

55% of Lung and Bronchus Cancer are diagnosed at Distant Stage
Breast **Incidence**: Stage distribution by race, 2011 - Percentages

- **Local** Stage: 69.8% of Breast Cancer are diagnosed at Local and Regional Stage

69.8% of Breast Cancer are diagnosed at Local and Regional Stage
77.9% of Prostate Cancer are diagnosed at Local Stage
Census Tracts 2000 and 2010

District of Columbia
2002 Wards

Legend
- 2002 Wards
- National Parks
- Water

Source: DC Cancer Registry

District of Columbia
2012 Wards

Legend
- 2012 Wards
- National Parks
- Water
All Sites Combined

Incidence for All Cancer Sites Combined by Wards
Cases diagnosed during 2011

Mortality for All Cancer Sites Combined by Wards
Deaths occurred during 2011

Legend
2012 Wards Count_MAR_WARD
259 - 290
294 - 339
340 - 380
381 - 417
418 - 496

Source: DC Cancer Registry

Legend
2012 Wards Count_MAR_WARD
68 - 72
73 - 103
104 - 134
135 - 168
169 - 197

Source: DC Vital Records
Breast

Incidence for Breast Cancer by Wards
Cases diagnosed during 2011

Mortality for Breast Cancer by Wards
Deaths occurred during 2011

Legend
2012 Wards
Count_MAR_WARD / none

Source: DC Cancer Registry

Legend
2012 Wards
Count_MAR_WARD

Source: DC Vital Records
Incidence for Colorectal Cancer by Wards
Cases diagnosed during 2011

Mortality for Colorectal Cancer by Wards
Deaths occurred during 2011

Legend
2012 Wards
Count_MAR_WARD / none

Source: DC Cancer Registry

Source: DC Vital Records
Incidence for Lung and Bronchus Cancer by Wards
Cases diagnosed during 2011

Mortality for Lung and Bronchus Cancer by Wards
Deaths occurred during 2011
Prostate

Incidence for Prostate Cancer by Wards
Cases diagnosed during 2011

Mortality for Prostate Cancer by Wards
Deaths occurred during 2011

Legend
2012 Wards
Count_MAR_WARD / none
- 39 - 40
- 40 - 52
- 52 - 57
- 57 - 75
- 75 - 103

Source: DC Cancer Registry

Legend
2012 Wards
Count_MAR_WARD / none
- 4
- 4 - 5
- 5 - 6
- 6 - 11
- 11 - 25

Source: DC Vital Records
# Cancer Incidence: Age Adjusted Rates, 2011, DC and National

<table>
<thead>
<tr>
<th></th>
<th>Both Genders</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Races*</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td><strong>All Sites</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>509.3</td>
<td>407.0</td>
<td>556.0</td>
</tr>
<tr>
<td>National</td>
<td>453.9</td>
<td>462.1</td>
<td>476.0</td>
</tr>
<tr>
<td><strong>Colorectal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>43.7</td>
<td>24.6</td>
<td>53.6</td>
</tr>
<tr>
<td>National</td>
<td>39.3</td>
<td>38.1</td>
<td>46.7</td>
</tr>
<tr>
<td><strong>Lung &amp; Bronchus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>55.8</td>
<td>30.0</td>
<td>71.1</td>
</tr>
<tr>
<td>National</td>
<td>55.5</td>
<td>56.4</td>
<td>64.5</td>
</tr>
<tr>
<td><strong>Breast</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prostate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All rates are age adjusted per 100,000 men and women (only women in Breast and only men in Prostate) and include invasive cases only.
* Includes White, Black and other races.
All ages included.
Source: DC Cancer Registry, National SEER9 Incidence.
Cancer **Mortality**: Age Adjusted Rates, **2011**,
**DC** and **National**

<table>
<thead>
<tr>
<th></th>
<th>Both Genders</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Races*</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>All Sites</td>
<td><strong>DC</strong></td>
<td>180.6</td>
<td>111.0</td>
</tr>
<tr>
<td></td>
<td><strong>National</strong></td>
<td>168.7</td>
<td>168.4</td>
</tr>
<tr>
<td>Colorectal</td>
<td><strong>DC</strong></td>
<td>19.3</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td><strong>National</strong></td>
<td>15.1</td>
<td>14.6</td>
</tr>
<tr>
<td>Lung &amp; Bronchus</td>
<td><strong>DC</strong></td>
<td>40.4</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td><strong>National</strong></td>
<td>46.0</td>
<td>46.7</td>
</tr>
<tr>
<td>Breast</td>
<td><strong>DC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>National</strong></td>
<td>21.5</td>
<td>20.9</td>
</tr>
<tr>
<td>Prostate</td>
<td><strong>DC</strong></td>
<td>37.0</td>
<td>21.5</td>
</tr>
<tr>
<td></td>
<td><strong>National</strong></td>
<td>20.7</td>
<td>19.2</td>
</tr>
</tbody>
</table>

All rates are age adjusted per 100,000 men and women (only women in Breast and only men in Prostate).
* Includes White, Black and other races.
All ages included.
Source: DC Cancer Registry, NCHS Mortality.
## CANCER INCIDENCE BY SEX, RACE AND STAGE OF DIAGNOSIS FOR THE MOST COMMON CANCER SITES FOR DC RESIDENTS - 2011 - NUMBER OF CASES

<table>
<thead>
<tr>
<th>SITE</th>
<th>PERCENT</th>
<th>TOTAL</th>
<th>SEX</th>
<th>MALE</th>
<th>FEMALE</th>
<th>WHITE</th>
<th>BLACK</th>
<th>OTHER</th>
<th>IN SITU</th>
<th>LOCAL</th>
<th>REGIONAL</th>
<th>DISTANT</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BREAST</td>
<td>19.7</td>
<td>639</td>
<td>7</td>
<td>632</td>
<td>214</td>
<td>393</td>
<td>25</td>
<td>141</td>
<td>285</td>
<td>156</td>
<td>32</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>PROSTATE</td>
<td>15.7</td>
<td>529</td>
<td>0</td>
<td>529</td>
<td>121</td>
<td>354</td>
<td>37</td>
<td>0</td>
<td>399</td>
<td>49</td>
<td>25</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>LUNG</td>
<td>9.2</td>
<td>329</td>
<td>155</td>
<td>144</td>
<td>50</td>
<td>242</td>
<td>7</td>
<td>~</td>
<td>54</td>
<td>55</td>
<td>164</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>COLON</td>
<td>6.8</td>
<td>273</td>
<td>138</td>
<td>135</td>
<td>62</td>
<td>196</td>
<td>15</td>
<td>24</td>
<td>95</td>
<td>76</td>
<td>50</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>BLOOD SYM</td>
<td>4.6</td>
<td>149</td>
<td>78</td>
<td>71</td>
<td>53</td>
<td>86</td>
<td>10</td>
<td>0</td>
<td>~</td>
<td>0</td>
<td>146</td>
<td>~</td>
<td></td>
</tr>
<tr>
<td>SKIN</td>
<td>3.4</td>
<td>111</td>
<td>71</td>
<td>40</td>
<td>100</td>
<td>9</td>
<td>~</td>
<td>43</td>
<td>35</td>
<td>6</td>
<td>~</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>KIDNEY</td>
<td>3.0</td>
<td>96</td>
<td>62</td>
<td>34</td>
<td>27</td>
<td>66</td>
<td>~</td>
<td>0</td>
<td>63</td>
<td>16</td>
<td>16</td>
<td>~</td>
<td></td>
</tr>
<tr>
<td>CORP UTERI</td>
<td>2.8</td>
<td>91</td>
<td>0</td>
<td>91</td>
<td>21</td>
<td>67</td>
<td>~</td>
<td>~</td>
<td>50</td>
<td>18</td>
<td>13</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>LIVER</td>
<td>2.8</td>
<td>90</td>
<td>62</td>
<td>28</td>
<td>9</td>
<td>79</td>
<td>~</td>
<td>0</td>
<td>33</td>
<td>19</td>
<td>25</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>PANCREAS</td>
<td>2.7</td>
<td>87</td>
<td>45</td>
<td>42</td>
<td>16</td>
<td>69</td>
<td>~</td>
<td>0</td>
<td>8</td>
<td>23</td>
<td>48</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>BLADDER</td>
<td>2.7</td>
<td>87</td>
<td>59</td>
<td>28</td>
<td>33</td>
<td>50</td>
<td>~</td>
<td>38</td>
<td>35</td>
<td>~</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>THYROID</td>
<td>2.7</td>
<td>87</td>
<td>20</td>
<td>67</td>
<td>31</td>
<td>42</td>
<td>14</td>
<td>0</td>
<td>65</td>
<td>19</td>
<td>~</td>
<td>~</td>
<td></td>
</tr>
<tr>
<td>LYMPH NODE</td>
<td>2.5</td>
<td>80</td>
<td>45</td>
<td>35</td>
<td>27</td>
<td>49</td>
<td>~</td>
<td>0</td>
<td>16</td>
<td>14</td>
<td>47</td>
<td>~</td>
<td></td>
</tr>
</tbody>
</table>
Technical Notes for DC Cancer Registry

- All Counts and Rates are for **DC residents only**.
- Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population.
- Incidence Age-adjusted rates calculated on **invasive cancers only**.
- Only Black and White races are presented, due to the small number of cases or deaths in other races, same criterion applies to Hispanic.
- All races includes White, Black and other races.
- Breast refers to **Female Breast only**.
- Selected sites refers to **top four cancer sites**.
- ~ Information not shown for small number of cases or deaths.
- ~ Statistic (rates) not calculated for small number of cases or deaths.
- Census tracts and Wards not include unknown, incomplete, incorrect addresses and PO Boxes for cancer cases or cancer deaths.
- **Wards** - Political subdivisions of the District of Columbia, created for the purpose of voting and representation. Ward boundaries were first established in 1801 and are updated every ten years, based on population changes reported by the U.S. Census Bureau.
- **Deaths** - Cancer deaths are based on information from all death certificates in the District of Columbia and neighboring states, and processed by the National Vital Statistics System (NVSS) at the National Center for Health Statistics (NCHS) and the State Center for Health Statistics in DC.
- **Source for Incidence**: District of Columbia Cancer Registry.
- **Source for Mortality**: State Center for Health Statistics, Vital Records.
Acknowledgements

The DC Cancer Registry and the DC Comprehensive Cancer Control Program wish to express their gratitude to the following for their supports:

• We would like to thank the cancer registrars throughout the district who abstract and submit data to the central registry. Without their data, this document would not have been possible.

• We appreciate the Center for Policy, Planning and Evaluation/State Center for Health Statistics/DC Vital Records for providing mortality information. Without their data, cancer mortality would not have been possible.

• We are grateful to the Cancer Advisory Board members for their guidance.

• The DC Cancer Registry wishes to acknowledge the Centers for Disease Control and Prevention (CDC) for its financial support under Cooperative Agreement #U5-8DP000846-05.