The National Cancer Registry Programme (NCRP) since 1982, has the coordinating unit at the Indian Council of Medical Research (ICMR) - National Centre for Disease Informatics and Research (NCDIR), Bengaluru. This report for 2012-2016 is based on the analysis of the data from 28 Population Based Cancer Registries (PBCRs) and 58 Hospital Based Cancer Registries (HBCRs). The registries have been categorized into 6 regions of the country.

The coding and classification of malignancies at NCRP follows International Statistical Classification of Diseases (10th revision) (ICD-10). The information on cancer is collected by the registries on a standard core form and is transmitted using in-house developed softwares provided by ICMR - NCDIR, Bengaluru.

This report provides information on cancer incidence, mortality, treatment and trends during the covered period. It addresses the need for cancer epidemiology, academics, research, policy making and program management towards prevention and control of cancer.

The data in this report pertain to the period 2012-2016.
Network of Hospital Based Cancer Registries

North
1. Postgraduate Institute of Medical Education and Research, Chandigarh
2. Dr. B.R. Ambedkar Institute Rotary Cancer Hospital, New Delhi
3. Indira Gandhi Institute of Medical Sciences, Patna
4. Sher-I-Kashmir Institute of Medical Sciences, Srinagar
5. Regional Cancer Centre, Indira Gandhi Medical College, Shimla
6. Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow
7. Max Super Speciality Hospital, New Delhi
8. Medanta Cancer Centre, Gurgaon
9. Fortis memorial Research Institute, Gurgaon
10. Mahavir Cancer Sansthan and Research Centre, Patna
11. Pravara Rural Hospital & Rural Medical College, Loni
12. Max Super Speciality Hospital, PPF, Delhi
13. Asian Institute of Medical Sciences, Faridabad
14. BPS Government Medical College for Women, Khampur Kalan, Sonipat, Haryana
15. Government Medical College, Jammu
16. Rajiv Gandhi Cancer Institute and Research Centre, New Delhi (2012-13)
17. Regional Cancer Centre Kamala Nehru Memorial Hospital, Allahabad

South
18. Amrita Institute of Medical Sciences and Research, Kochi
19. Vydgihi Institute of Medical Sciences, Bengaluru
20. Regional Cancer Centre, Thiruvananthapuram
21. Cancer Institute (WIA), Chennai
22. Malabar Cancer Centre, Kannur
23. International Cancer Centre, Neyyoor
24. Kidwai Memorial Institute of Oncology, Bengaluru
25. Govt Arignar Anna Memorial Cancer Hospital & Research Institute, Ranchorpuram
26. JIPMER, Regional Cancer Centre, Puducherry
27. Shakti Travai Memorial Hospital & Research Centre, Hubli
28. Rural Development Trust, Bathalapalle
29. SDM College of Dental Sciences and Hospital, Dhanbad
30. Government Medical College, Thrissur
31. Father Muller Medical College Hospital, Mangalore
32. MES Medical College & Hospital, Perinthalmanna
33. St. John Medical Hospital, Bengaluru
34. Mallya Institute of Medical Sciences, Mandya
35. HCG NMR Cancer Centre, Hubli
36. Narayana Hrudayalaya Health City, Bengaluru
37. Erode Cancer Centre, Thindal, Erode
38. General Hospital, Ernakulam
39. Indo-American Cancer Institute & Research Centre, Hyderabad
40. HCG Bangalore Institute of Oncology, Bengaluru (2012-2013)

East
42. Acharya Harithar Regional Cancer Centre, Cuttack
43. Chittaranjan National Cancer Institute, Kolkata
44. Tata Medical Centre, Kolkata
45. Apollo Hospital, Bhubaneswar
46. Tata Memorial Hospital, Mumbai
47. The Gujarat Cancer & Research Institute, Ahmedabad

Central
48. Gandhi Medical College, Bhopal
49. Regional Cancer Centre, Raipur
50. BSI Regional Cancer Hospital, Cancer Relief Society, Nagpur
51. Cancer Hospital & Research Institute, Gwalior

North East
52. Assam Medical College, Dibrugarh
53. Dr. B Borooah Cancer Institute, Guwahati
54. Cachar Cancer Hospital, Silchar
55. Mizoram State Cancer Institute (Civil Hospital), Aizawl
56. Regional Cancer Centre, Agartala
57. Regional Institute of Medical Sciences, Imphal
58. North east Cancer Hospital & Research Institute, Guwahati

Cancer Atlas
- Karnataka 88
- Haryana 110
- Punjab 91
All sites of cancer (ICD-10:C00-C97) - Comparison of Age Adjusted Incidence Rates (AARs) of 28 PBCRs under NCRP
Relative Proportion (%) of Cancer Sites Associated with the Use of Tobacco Relative to All Sites of Cancer in 28 PBCRs under NCRP

**NORTH**
- Delhi: 12.4
- Patiala district: 13.1

**SOUTH**
- Kollam district: 12.4
- Hyderabad district: 13.5
- Chennai: 13.6
- Thiruvananthapuram district: 10.1
- Bangalore: 14.2

**EAST**
- Kolkata: 15.4

**WEST**
- Ahmedabad urban: 18.6
- Aurangabad: 16.3
- Osmanabad & Beed: 12.7
- Pune: 15.2
- Mumbai: 15.6
- Barshi rural: 14.9

**CENTRAL**
- Bhopal: 17.7
- Nagpur: 17.3
- Wardha district: 18.6

**NORTH EAST**
- East Khasi Hills district: 70.4
- Meghalaya: 43.1
- Cachar district: 23.4
- Tripura state: 21.1
- Dibrugarh district: 21.8
- Kamrup urban: 23.5
- Mizoram state: 24.4
- Nagaland: 22.1
- Imphal West district: 11.8
- Manipur state: 19.1
- Sikkim state: 18.2
- Pasighat: 14.4
- West Arunachal: 11.1

CR and AAR given in Parentheses

Males(%) | Females (%)
Annual Percentage Change (APC) in Age Adjusted Incidence Rates (AAR) for Selected Sites of Cancer in Selected PBCRs Over a Period of Time

**Cancer Breast**

- **Females**
  - Aurangabad: 6.8%
  - Sikki state: 5.8%
  - Karmrup urban: 5.0%
  - Mizoram state: 4.6%
  - Dibrugarh district: 4.1%
  - Pune: 3.8%
  - Thirupuram taluk: 3.3%
  - Bangalore: 3.1%
  - Imphal West district: 3.0%
  - Kollam district: 2.7%
  - Chennai: 2.6%
  - Bhopal: 2.1%
  - Delhi: 1.5%
  - Mumbai: 1.4%
  - Barihi rural: 0.5%
  - Nagpur: 0.4%

- **Males**
  - Aurangabad: 2.1%
  - Nagaon: 2.1%
  - Kollam district: 0.3%
  - Dibrugarh district: 0.0%
  - Bangalore: 1.9%
  - Bhopal: 2.1%
  - Pune: 2.3%
  - Mumbai: 2.4%
  - Kollam district: 2.4%
  - Delhi: 2.8%
  - Barihi rural: 3.1%
  - Chennai: 3.5%
  - Thirupuram taluk: 4.3%
  - Imphal West district: 5.7%

---

**Cancer Cervix Uteri**

- **Males**
  - Aurangabad: 1.4%
  - Nagaon: 1.7%
  - Pune: 1.7%
  - Kollam district: 1.4%
  - Dibrugarh district: 1.3%
  - Delhi: 0.9%
  - Mizoram state: 0.8%
  - Chennai: 0.6%
  - Bhopal: 0.6%
  - Kolkata district: 0.2%
  - Thirupuram taluk: 0.3%
  - Skikim state: 0.3%
  - Nagaon: -0.4%
  - Thirupuram taluk: -0.6%
  - Kollam district: -0.6%
  - Barihi rural: -1.4%
  - Mumbai: -1.5%

- **Females**
  - Aurangabad: 3.7%
  - Nagaon: 1.2%
  - Bhopal: 0.9%
  - Mizoram state: 0.6%
  - Dibrugarh district: 0.5%
  - Kolkata urban: 0.4%
  - Delhi: 0.3%
  - Thirupuram taluk: -0.5%
  - Chennai: -1.0%
  - Mumbai: -1.3%
  - Bhopal: -1.4%
  - Thirupuram taluk: -1.5%
  - Kolkata district: -2.6%
  - Skikim state: -3.1%

---

**Head & Neck Cancers**

- **Males**
  - Aurangabad: 4.4%
  - Nagaon: 1.2%
  - Pune: 1.2%
  - Kollam district: 1.7%
  - Dibrugarh district: 1.3%
  - Delhi: 0.9%
  - Mizoram state: 0.6%
  - Chennai: 0.6%
  - Bhopal: 0.6%
  - Kolkata district: 0.2%
  - Thirupuram taluk: 0.3%
  - Skikim state: 0.3%
  - Nagaon: -0.4%
  - Thirupuram taluk: -0.6%
  - Kolkata district: -0.6%
  - Barihi rural: -1.4%
  - Mumbai: -1.5%

- **Females**
  - Aurangabad: 3.7%
  - Nagaon: 1.2%
  - Bhopal: 0.9%
  - Mizoram state: 0.6%
  - Dibrugarh district: 0.5%
  - Kolkata urban: 0.4%
  - Delhi: 0.3%
  - Thirupuram taluk: -0.5%
  - Chennai: -1.0%
  - Mumbai: -1.3%
  - Bhopal: -1.4%
  - Thirupuram taluk: -1.5%
  - Kolkata district: -2.6%
  - Skikim state: -3.1%

---

**Cancer Lung**

- **Males**
  - Kollam district: 3.4%
  - Aurangabad: 2.8%
  - Pune: 2.2%
  - Chennai: 1.5%
  - Mizoram state: 1.4%
  - Delhi: 1.3%
  - Bangalore: 1.3%
  - Thirupuram taluk: 1.2%
  - Nagaon: 0.2%
  - Bhopal: -0.4%
  - Mumbai: -1.0%
  - Sikki state: -1.5%
  - Dibrugarh district: -1.6%
  - Kolkata district: -1.7%
  - Barihi rural: -1.2%
  - Chennai: 1.8%
  - Thirupuram taluk: 2.4%
  - Kolkata district: 2.4%
  - Bhopal: 2.1%
  - Delhi: 5.9%
  - Pune: 6.0%
  - Thirupuram taluk: 6.8%
  - Kollam district: 6.8%
  - Delhi: 6.8%
  - Pune: 6.8%
  - Thirupuram taluk: 6.8%
  - Athletics: 6.8%
  - Barihi rural: 6.8%
  - Chennai: 6.8%
  - Thirupuram taluk: 6.8%
  - Kolkata district: 6.8%
  - Bhopal: 6.8%
  - Delhi: 6.8%
  - Pune: 6.8%
  - Thirupuram taluk: 6.8%
  - Athletics: 6.8%
  - Barihi rural: 6.8%
  - Chennai: 6.8%
  - Thirupuram taluk: 6.8%

- **Females**
  - Kollam district: 1.1%
  - Aurangabad: 1.1%
  - Pune: 0.6%
  - Bhopal: 0.2%
  - Mumbai: 0.1%
  - Barihi rural: -0.4%
  - Chennai: -0.7%
  - Thirupuram taluk: -0.7%
  - Kollam district: -1.3%
  - Thirupuram taluk: -1.3%
  - Bhopal: -1.3%
  - Delhi: -1.3%
  - Thirupuram taluk: -1.3%
  - Kolkata district: -1.3%

---

**Cancer Stomach**

- **Males**
  - Kollam district: 4.5%
  - Aurangabad: 4.5%
  - Pune: 4.5%
  - Chennai: 4.4%
  - Thirupuram taluk: 4.2%
  - Kolkata district: 3.9%
  - Delhi: 3.9%
  - Bhopal: 3.9%
  - Pune: 3.9%
  - Thirupuram taluk: 3.9%

- **Females**
  - Kollam district: 11.7%
  - Aurangabad: 11.7%
  - Pune: 11.7%
  - Bhopal: 11.7%
  - Mumbai: 11.7%
  - Thirupuram taluk: 11.7%
  - Kolkata district: 11.7%
  - Delhi: 11.7%
  - Thirupuram taluk: 11.7%
  - Chennai: 11.7%
  - Thirupuram taluk: 11.7%
  - Kolkata district: 11.7%
  - Bhopal: 11.7%

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**Annual Percentage Change (%) - Increase in APC, Decrease in APC; * Significant Increase or decrease in APC at 95% confidence level**

www.ncdirindia.org
### Clinical Extent of Disease for Selected Anatomical Sites of Cancer (% in 58 HBCRs)

<table>
<thead>
<tr>
<th>Anatomical Site of Cancer</th>
<th>Clinical Extent of Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast (Females)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Localised</td>
</tr>
<tr>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Carcix Uteri</td>
<td>40</td>
</tr>
<tr>
<td>Head &amp; Neck (Both Sexes)</td>
<td>40</td>
</tr>
<tr>
<td>Lung (Males)</td>
<td>40</td>
</tr>
<tr>
<td>Lung (Females)</td>
<td>40</td>
</tr>
<tr>
<td>Stomach (Both Sexes)</td>
<td>40</td>
</tr>
</tbody>
</table>

### Types of Treatment According to Clinical Extent of Disease for Selected Anatomical Sites of Cancer (% in 58 HBCRs)

<table>
<thead>
<tr>
<th>Breasts (Females)</th>
<th>Multi-modality</th>
<th>Localised</th>
<th>Loco Regional</th>
<th>Distant Metastasis</th>
<th>Unknown Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Radiotherapy</td>
<td>3</td>
<td>2</td>
<td>80</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Systemic Therapy</td>
<td>10</td>
<td>12</td>
<td>46</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>13</td>
<td>6</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Carcix Uteri</td>
<td>Multi-modality</td>
<td>13</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Radiotherapy</td>
<td>25</td>
<td>31</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Systemic Therapy</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Radiotherapy + Chemotherapy</td>
<td>50</td>
<td>57</td>
<td>47</td>
<td>39</td>
</tr>
<tr>
<td>Head &amp; Neck (Both Sexes)</td>
<td>Multi-modality</td>
<td>45</td>
<td>54</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Radiotherapy</td>
<td>22</td>
<td>27</td>
<td>25</td>
<td>16</td>
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<tr>
<td></td>
<td>Systemic Therapy</td>
<td>9</td>
<td>11</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>24</td>
<td>8</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Lung (Both Sexes)</td>
<td>Multi-modality</td>
<td>31</td>
<td>33</td>
<td>31</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Radiotherapy</td>
<td>12</td>
<td>14</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Systemic Therapy</td>
<td>51</td>
<td>51</td>
<td>45</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Stomach (Both Sexes)</td>
<td>Multi-modality</td>
<td>34</td>
<td>40</td>
<td>18</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Radiotherapy</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Systemic Therapy</td>
<td>43</td>
<td>38</td>
<td>66</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td>21</td>
<td>17</td>
<td>7</td>
<td>21</td>
</tr>
</tbody>
</table>
Changes in Ten Leading Sites (%) for Six Selected PBCRs (1982 - 2016)

1982-1991

**Males**

- (9.8) Stomach 1
- (8.1) Lung 2
- (8.0) Oesophagus 3
- (5.3) Hypopharynx 4
- (4.0) Larynx 5
- (3.9) NHL 6
- (3.7) Prostate 7
- (3.5) Mouth 8
- (3.3) Tongue 9
- (3.2) Brain, NS 10

1988-1997

- (10.5) Hypopharynx 1
- (9.1) Oesophagus 2
- (4.3) Penis 3
- (5.5) Mouth 4
- (4.5) Tongue 5
- (4.4) Larynx 6
- (4.2) Liver 7
- (4.0) Rectum 8
- (3.4) Myeloid Leuk 9
- (3.2) Lung 10

2005-2014

- (1) Lung (7.3)
- (2) Stomach (7.5)
- (3) Prostate (6.7)
- (4) Oesophagus (6.1)
- (5) NHL (4.3)
- (6) Liver (4.2)
- (7) Tongue (4.1)
- (8) Mouth (3.8)
- (9) Brain, NS (3.8)
- (10) Colon (3.6)

**Females**

- (24.5) Cervix Uteri 1
- (16.5) Breast 2
- (7.4) Mouth 3
- (4.4) Oesophagus 4
- (4.3) Stomach 5
- (4.0) Ovary 6
- (2.7) Thyroid 7
- (1.7) Rectum 8
- (1.6) NHL 9
- (1.5) Brain, NS 10

1988-1997

- (49.6) Cervix Uteri 1
- (15.1) Breast 2
- (3.8) Oesophagus 3
- (2.5) Ovary 4
- (1.9) Other Skin 5
- (1.7) Mouth 6
- (1.6) Stomach 7
- (1.3) Rectum 8
- (1.2) NHL 9
- (1.2) Myeloid Leuk 10

2007-2016

- (1) Cervix Uteri (28.2)
- (2) Breast (18.7)
- (3) Ovary (5.0)
- (4) Oesophagus (4.8)
- (5) Other Skin (2.9)
- (6) Lung (2.9)
- (7) Stomach (2.5)
- (8) Thyroid (2.2)
- (9) Mouth (2.2)
- (10) Colon (2.0)

1988-1997

- (11.8) Lung 1
- (8.6) Tongue 2
- (7.7) Mouth 3
- (7.0) Oesophagus 4
- (6.4) Hypopharynx 5
- (4.1) Prostate 6
- (3.7) Larynx 7
- (3.6) Brain, NS 8
- (3.5) Stomach 9
- (2.8) Myeloid Leuk 10

2006-2015

- (1) Mouth (14.1)
- (2) Lung (10.7)
- (3) Tongue (9.5)
- (4) Larynx (6.2)
- (5) Oesophagus (4.8)
- (6) Prostate (4.5)
- (7) Hypopharynx (4.3)
- (8) NHL (3.6)
- (9) Myeloid Leuk (2.6)
- (10) Brain, NS (2.4)

1988-1997

- (23.8) Cervix Uteri 1
- (21.8) Breast 2
- (6.3) Ovary 3
- (4.9) Mouth 4
- (4.7) Oesophagus 5
- (2.7) Gall bladder 6
- (2.3) Lung 7
- (2.1) Brain, NS 8
- (1.9) Corpus Uteri 9
- (1.8) Myeloid Leuk 10

2006-2015

- (1) Breast (28.4)
- (2) Cervix Uteri (14.1)
- (3) Ovary (7.6)
- (4) Mouth (4.9)
- (5) Oesophagus (4.1)
- (6) Gall bladder (3.0)
- (7) Lung (3.0)
- (8) Colon (2.9)
- (9) Corpus Uteri (2.6)
- (10) NHL (1.9)

[%, Anatomical site of cancer, Rank]
Impacting NCD Public Health Actions and Policies

Collaborate Innovate Inspire

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