Colorectal Cancer Facts & Figures: Key Findings
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MPH
Colorectal Cancer Statistics 2023

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Colorectal cancer statistics, 2023

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Abstract
Colorectal cancer (CRC) is the second most common cause of cancer death in the United States. Every 3 years, the American Cancer Society provides an update of CRC statistics based on incidence from population-based cancer registries and mortality from the National Center for Health Statistics. In 2023, approximately 153,000 individuals will be diagnosed with CRC and 32,500 will die from the disease, including 19,500 cases and 3730 deaths in individuals younger than 30 years. The decline in CRC incidence observed from 1995 to 2018 was driven primarily by an increase in individuals younger than 53 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years of 1%, 2%, and 3% annually during the 1980s to 1% annually during 2000s to 1% annually during 2010s, driven partly by an increase in individuals younger than 58 years.
Objectives

➢ Monitor progress against colorectal cancer

➢ Report emerging trends

➢ Evaluate disparities
  ▪ geography
  ▪ race and ethnicity
    American Indian & Alaska Native persons
Data sources

Incidence

• Surveillance, Epidemiology, & End Results (SEER) Program, National Cancer Institute
  ✓ Long-term
  ✓ Limited population coverage
  ✓ Survival, probability of developing/dying, prevalence

• National Program of Cancer Registries (NPCR), CDC
  ✓ Since 1995
  ✓ More complete

• North American Association of Central Cancer Registries (NAACCR)
  ✓ Near-complete population coverage
  ✓ Delay-adjusted from 1998 (90% coverage)
Data sources and analysis

Mortality
National Center for Health Statistics (NCHS)
Underlying cause of death recorded on death certificates filed in 50 states & DC
✓ 1930-2020
✓ 99+% population coverage

Additional statistics
• 2023 Case/Death Estimates
  ✓ Spatio-temporal modeling & projection
  ✓ Method revised in 2021
• Trend & other analyses – NCI software
  ✓ SEER*Stat, version 8.3.9
  ✓ Joinpoint Regression Program, version 4.9.0.1
Long-Term Trends in Colorectal Cancer Incidence, 1975–2020, US

Colorectal Cancer Statistics 2023

46%
Long-Term Trends in Colorectal Cancer Incidence, 1975–2020, US

Colorectal Cancer Statistics 2023

46%
57%
Adenoma and Sessile Serrated Lesion Detection Rates at Screening Colonoscopy for Ages 45–49 Years vs Older Ages Since the Introduction of New Colorectal Cancer Screening Guidelines

Uri Ladabaum,¹ John Shepard,² and Ajitha Mannalithara¹
## Estimated New Colorectal Cancer Cases and Deaths in 2023

### CASES

<table>
<thead>
<tr>
<th>Age, years</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-49</td>
<td>19,550</td>
<td>13%</td>
</tr>
<tr>
<td>50-64</td>
<td>48,210</td>
<td>32%</td>
</tr>
<tr>
<td>65+</td>
<td>85,260</td>
<td>56%</td>
</tr>
<tr>
<td>All ages</td>
<td>153,020</td>
<td>100%</td>
</tr>
</tbody>
</table>

### DEATHS

<table>
<thead>
<tr>
<th>Age, years</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-49</td>
<td>3,750</td>
<td>7%</td>
</tr>
<tr>
<td>50-64</td>
<td>13,160</td>
<td>25%</td>
</tr>
<tr>
<td>65+</td>
<td>35,640</td>
<td>68%</td>
</tr>
<tr>
<td>All ages</td>
<td>52,550</td>
<td>100%</td>
</tr>
</tbody>
</table>

45% of cases in ages <65 yrs, up from 27% in 1995
Trends in colorectal cancer incidence by age, 1998–2019
Trend in the percentage of people diagnosed before 55 years, 1995–2019

Percentage of diagnoses <55 y

Year of diagnosis


0% 5% 10% 15% 20% 25%

11% (1 in 10)

20% (1 in 5)
Trends in colorectal cancer incidence by age & stage at diagnosis

20–49 years

- Regional: Increasing trend
- Localized: Stable trend
- Distant: Decreasing trend
- Unstaged: Stable trend

50–64 years

- Regional: Increasing trend
- Localized: Stable trend
- Distant: Decreasing trend
- Unstaged: Stable trend

65+ years

- Regional: Decreasing trend
- Localized: Stable trend
- Distant: Decreasing trend
- Unstaged: Stable trend
Trends in colorectal cancer stage at diagnosis (%)

Stage III is most common

advanced (reg/dist): 52%  60% (3 in 5)
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**Trends in colorectal cancer incidence by subsite**

**Changing Distribution of Primary Cancers in the Large Bowel**

James B. Rhodes, MD; Frederick F. Holmes, MD; Gary M. Clark, PhD

**Continued Rightward Shift of Colorectal Cancer**

Cucino, Claudia M.D.; Buchner, Anna M. M.D.; Ph.D.; Sonnenberg, Amnon M.D., M.Sc.

Trends in the ratio of colon vs rectal cancer incidence by sex

Incidence rate ratio of colon vs rectal tumors

Year of diagnosis

0 0.1 0.2 0.3 0.4 0.5 0.6


MALE

FEMALE

Colorectal Cancer Statistics 2023
Trends in colorectal cancer incidence by subsite & age

20–49 years
- Rectum
- Distal colon
- Proximal colon
- Unknown

50–64 years
- Rectum
- Distal colon
- Proximal colon
- Unknown

65+ years
- Proximal colon
- Rectum
- Distal colon
- Unknown
Disparities in incidence by race & ethnicity

American Indian incidence limited to Purchased/Referred Care Delivery Area counties and mortality adjusted for racial misclassification.

Native American incidence limited to Purchased/Referred Care Delivery Area counties; mortality are adjusted for racial misclassification using factors from the National Center for Health Statistics.
CRC Incidence among Native American people by region, 2014–2018

CRC Incidence among Native American people by region & sex, 2014–2018

Early-onset colorectal cancer trends in Native Americans

Incidence

Mortality
Summary

➢ Continued progress confined to age 65+ years
➢ Shift to younger age: 20% of cases <55 y, up from 11% in 1995
➢ Shift to more advanced disease: 60% of cases, up from 52% in 2005
➢ Shift to left-sided tumors: 31% rectal vs 27% in 1995
➢ Stark disparities
  ▪ State: 27 in Utah vs 47 in Mississippi
  ▪ Racial/ethnic group: 29 in Asian/Pac Isl vs 89 in Native Alaskan
  ▪ Wide variation within Native American groups; high burden in some women
Thank you!
Collaborators

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Ahmedin Jemal, PhD, DMV
Questions
Thank You