



Annual Meeting
Nov 16, 2021

2021-2025
Idaho Comprehensive Cancer Plan
Annual Update on Data Measures

Chris Johnson, Epidemiologist
Cancer Data Registry of Idaho
cjohnson@teamiha.org

Acknowledgments and Disclaimer

- This project was funded in whole with Federal funds from the National Cancer Institute, National Institutes of Health, Department of Health and Human Services, under Contract No. HHSN261201800006I, and the Centers for Disease Control and Prevention, Department of Health and Human Services, under Cooperative Agreement NU58DP006270 to the Cancer Data Registry of Idaho, Idaho Hospital Association.
- The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the National Cancer Institute or the Centers for Disease Control and Prevention.

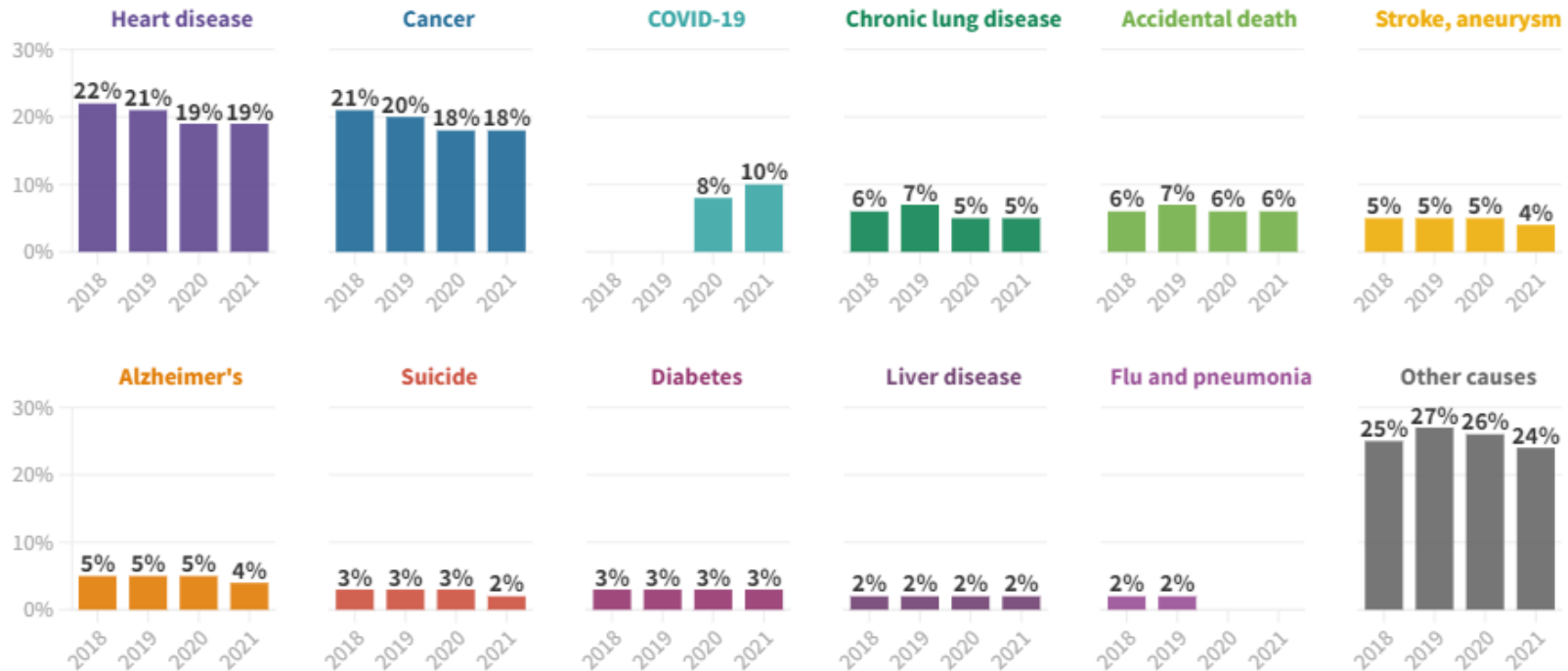
COVID-19 Impacts on Cancer Burden

- *“Nearly immediately at the start of the COVID-19 pandemic, the clinical and public health cancer community voiced concerns over the disruption that the pandemic would have on the cancer care spectrum – including delaying cancer screenings or delaying, modifying or forgoing critical cancer care.”*
 - Richards M, Anderson M, Carter P, Ebert BL, Mossialos E. The impact of the COVID-19 pandemic on cancer care. Nat Cancer 2020: 1-3.
- Screening and diagnostic procedures were down in Idaho in the beginning of 2020.
- Unknown impact of current Crisis Standards of Care. Non-emergency surgeries were on hold in some health systems.
- COVID-19 is a new, competing cause of death.
 - 1,357 COVID-19 deaths among Idaho residents in 2020.
 - ~400 additional excess deaths not directly attributable to COVID-19.

COVID-19 Impacts on Cancer Burden

COVID-19 is a top killer of Idahoans

These charts show the most common causes of death for Idahoans per year, by percentage of all deaths attributed to each cause. The coronavirus disease was responsible for 10% of Idahoans' deaths from January through September of this year. These numbers do not include deaths from October, one of Idaho's most fatal months for COVID-19 since the pandemic began. For 2021, 3% of deaths still have a pending or unspecified cause of death.



Slide 5

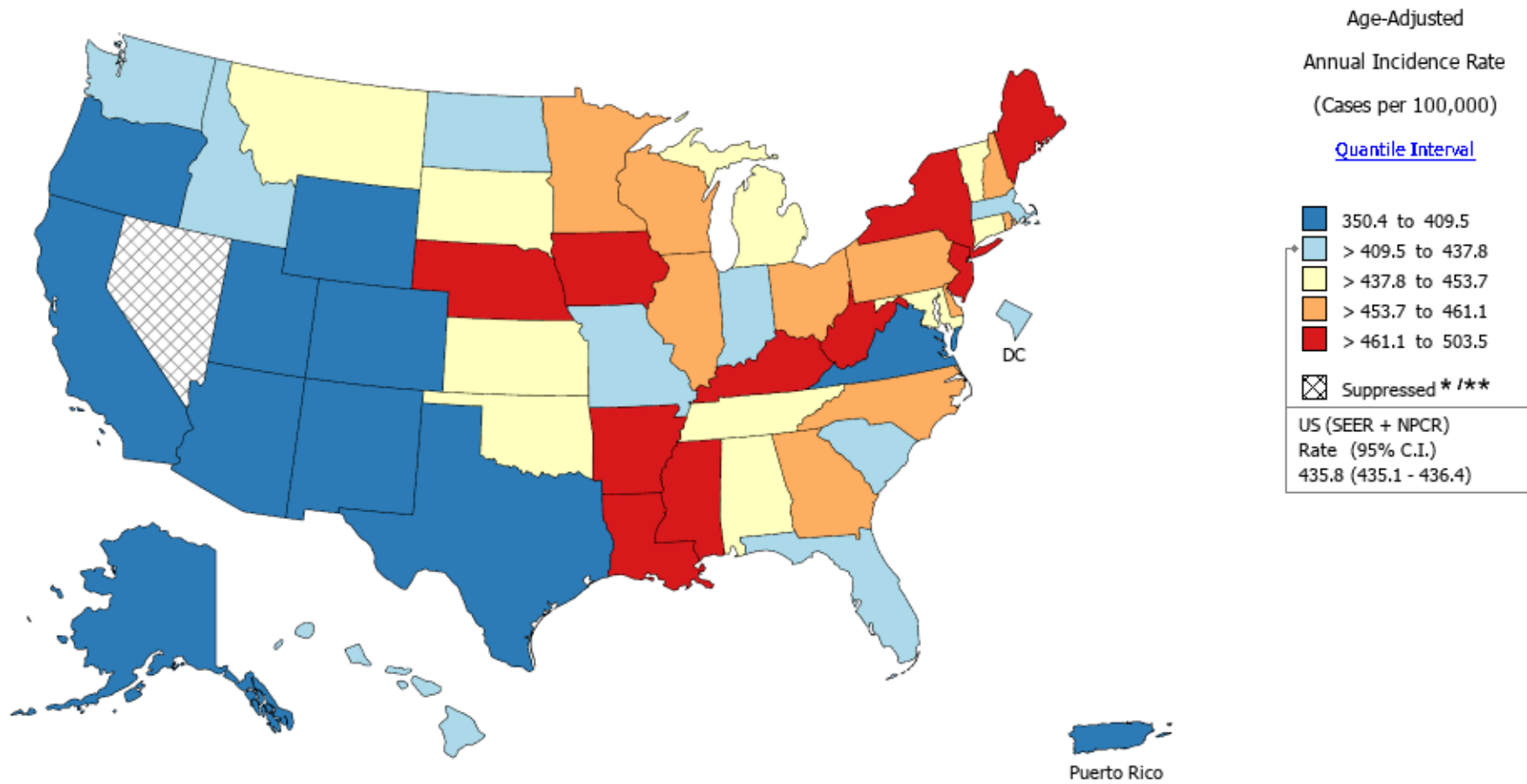
Source: Idaho Bureau of Vital Records and Health Statistics • Audrey Dutton / Idaho Capital Sun

Cancer Burden in Idaho

- Since 2008, #1 or #2 cause of death in Idaho each year
 - About 20% of deaths are from cancer
 - 3,002 deaths from cancer in 2020
- In 2019 in Idaho (final data):
 - 9,180 new invasive cases
 - 1,220 new in situ cases

~31% of those diagnosed this year will die of cancer within five years

Incidence Rates[†] for United States by State
All Cancer Sites, 2018
All Races (includes Hispanic), Both Sexes, All Ages



Cancer Risk Factors/Screening in Idaho

- In 2020, Idaho ranked 18th lowest among states for the proportion of adults who were current smokers (age-adjusted 14.1%)
- Idaho has among the lowest screening rates in the country (2020 data) for cancers of the
 - Colon and rectum (47th) [AA 66.4%]
 - Breast (47th) [AA 71.5%]
 - Cervix (49th) [AA 71.2%]

2021-2025 Idaho Comprehensive Cancer Plan Update on Data Measures

Across the cancer continuum:

- Risk Factors
- Screening
- Incidence
- Treatment
- Quality of Life
- Survival
- Mortality





What is new – November 2021

- BRFSS 2020
- CDRI 2019 – incidence and survival
- BVRHS 2020 - mortality
- Clinical trial enrollment 2019

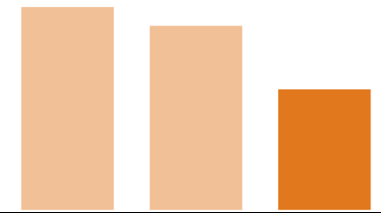


Data Sources

- CDRI is the source for cancer incidence and survival data in Idaho.
- Cancer mortality, risk factor, and screening data come from the Bureau of Vital Records and Health Statistics, Division of Public Health, Idaho Department of Health and Welfare.

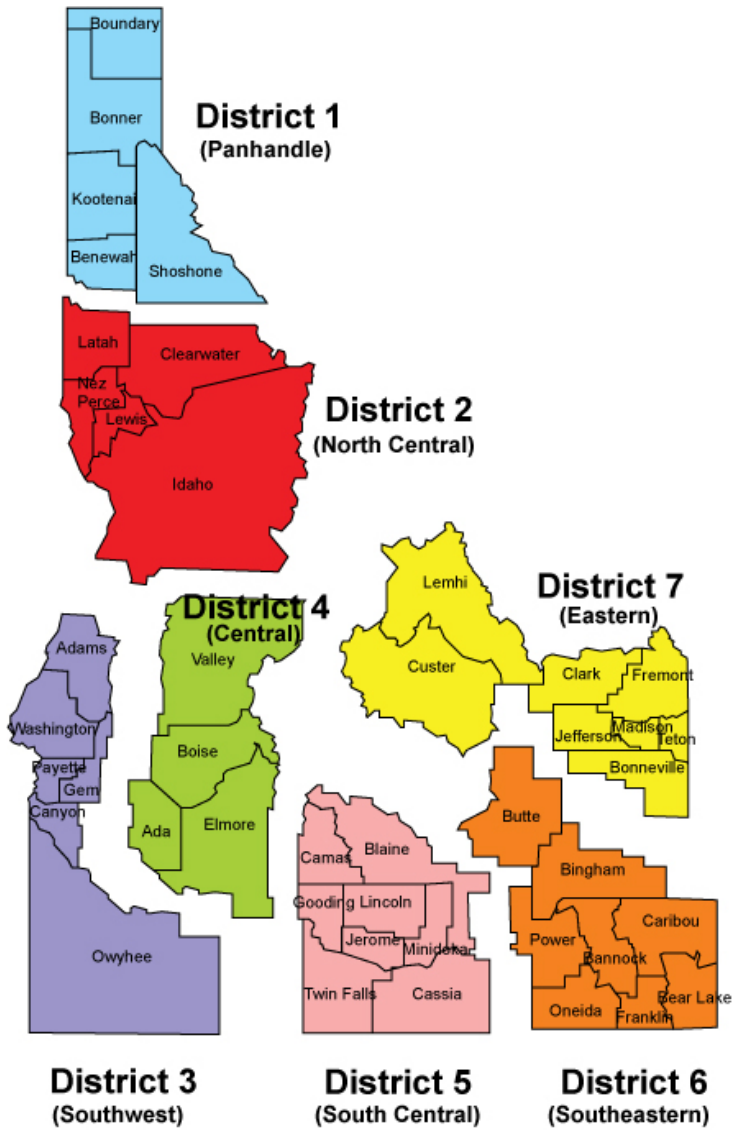
Scorecard

Symbol	Meaning
	CCAI 2025 Target Achieved
	Progress towards Target
	No Progress toward target
	Losing ground, moving in wrong direction

Goal 1: Reduce incidence and mortality of tobacco-related cancers

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
1.1	Current use of any tobacco products by adults [at least 1 form of cigarettes; cigars, cigarillos, filtered little cigars; regular pipes, water pipes, hookah; e-cigarettes; and/or smokeless tobacco products every day or some days] (Age adjusted to the year 2000 standard population)	27.2% BRFSS 2019	24.6% BRFSS 2020	16.2% HP2030 TU-01		
1.2	Current use of any tobacco products among adolescents [percent of students in grades 9 through 12 used cigarettes, e-cigarettes, cigars, smokeless tobacco, hookah, pipe tobacco, and/or bidis in the past 30 days]	22.8% YRBS 2019		18.2% CCAI (20%)		

Local Data



Goal 2: Increase access to healthy food options and opportunities for physical activity

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
2.1	Percentage of adults aged 18+ who do enough aerobic physical activity for substantial health benefits (age adjusted to the year 2000 standard population)	34.5% BRFSS 2019		59.2% HP2030 PA-02		
2.2	Percentage of adults aged 20+ who are at a healthy weight (BMI >= 18.5 and <= 25.0; age adjusted to the year 2000 standard population)	33.4% BRFSS 2019	31.0% BRFSS 2020	40.1% CCAI (20%)		
2.3	Proportion of of students in grades 9 through 12 who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	47.6% YRBS 2019		57.1% CCAI (20%)		

Percentage of adults aged 20+ who are at a healthy weight

Region	Percent	Low95%CI	Up95%CI	n
PHD1	29.8	25.0	35.0	591
PHD2	29.1	24.6	34.0	639
PHD3	27.3	22.8	32.2	855
PHD4	36.7	32.5	41.2	797
PHD5	29.5	25.3	34.0	656
PHD6	26.6	22.8	30.9	748
PHD7	28.2	24.8	31.9	882

Goal 3: Increase protective behaviors from sun and other ultraviolet radiation exposure

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
3.1	Percentage of adolescents in grades 9 through 12 who report using artificial sources of ultraviolet light for tanning	5.1% YRBS 2019		4.1% CCAI (20%)	<p>The progress bar consists of two vertical bars. The left bar is light orange and represents the current baseline of 5.1%. The right bar is a darker orange and represents the target of 4.1%. The current bar is taller than the target bar, indicating that the current level is above the target.</p>	

Goal 4: Increase vaccination rate for vaccines shown to reduce the risk of cancer

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
4.1	Percentage of adolescent females aged 13-17 years who completed 3 doses of the HPV vaccine, or 2 doses 6 months apart if 1st dose before age 15	48.3% IRIS 2020		80.0% HP2030 IID-08		
4.2	Percentage of adolescent males aged 13-17 years who completed 3 doses of the HPV vaccine, or 2 doses 6 months apart if 1st dose before age 15	44.4% IRIS 2020		80.0% HP2030 IID-08		
4.3	Percentage of newborns receiving hepatitis B vaccine (Hepatitis B vaccine administered from birth through age 3 days)	75.8% IRIS 2020		91.0% CCAI (20%)		

Goal 5: Reduce cancer risk related to environmental carcinogens

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
5.1	Percentage of adults living in households ever been tested for radon (age adjusted to the year 2000 standard population)	23.4% BRFSS 2018	23.3% BRFSS 2020	28.1% CCAI (20%)		

Percentage of adults living in households ever been tested for radon

Region	Percent	Low95%CI	Up95%CI	n
PHD1*	31.8	26.5	37.5	517
PHD2	15.6	12.2	19.6	575
PHD3*	17.9	14.5	22.0	774
PHD4	25.7	22.0	29.8	697
PHD5	19.0	15.8	22.6	605
PHD6	24.0	20.1	28.4	685
PHD7	23.6	20.3	27.2	817







Goal 6: Reduce breast cancer deaths and rate of late stage diagnosis through screening and early detection

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
6.1	Percentage of women aged 50 to 74 who had a mammogram within the past two years (age adjusted to the year 2000 standard population)	67.8% BRFSS 2018	71.3% BRFSS 2020	77.1% HP2030 C-05		
6.2	Age-adjusted rate per 100,000 females of breast cancer diagnoses at late stage (regional and distant)	45.7 CDRI 2018	43.7 CDRI 2019	41.1 CCAI (10%)		
6.3	Age-adjusted mortality rate, female breast cancer	18.5 BVRHS 2019	17.0 BVRHS 2020 (Prelim Pops)	15.3 HP2030 C-04		

Local Data - Incidence

Breast - late (regional and distant) stage/2019					
	Rate	Lower CI	Upper CI	Count	Rate Ratio
State of Idaho	43.7	39.6	48.1	449	
Health District 1	42.5	32.9	54.3	75	0.97
Health District 2	52.3	34.8	75.6	33	1.20
Health District 3	43.5	33.9	55.1	75	1.00
Health District 4	45.0	37.5	53.5	135	1.03
Health District 5	47.7	35.3	63.1	53	1.09
Health District 6	42.2	29.9	57.8	42	0.97
Health District 7	32.0	22.1	44.7	36	0.73

Goal 7: Reduce deaths and numbers of new cases of cervical cancer through screening and early detection

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
7.1	Percentage of women aged 21-65 who receive a cervical cancer screening based on the most recent guidelines (age adjusted to the year 2000 standard population)	72.8% BRFSS 2018 (was 79.9% with previous criteria - see data notes)	73.9% BRFSS 2020 (see data notes for updated screening criteria)	84.3% HP2030 C-09		
7.2	Age-adjusted rate per 100,000 females of invasive cervical cancer diagnoses	8.3 CDRI 2018	8.0 CDRI 2019	6.6 CCAI (20%)		
7.3	Age-adjusted cervical cancer mortality rate per 100,000 females	1.8 BVRHS 2019	2.0 BVRHS 2020 (Prelim Pops)	1.4 CCAI (20%)		

Goal 8: Reduce the numbers of deaths and new cases of colorectal cancers through screening and early detection

45 based on 2021 USPSTF Guideline

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
8.1	Percentage of adults aged 50-75 who reported receiving a colorectal cancer screening based on the most recent guidelines (age adjusted to the year 2000 standard population) [*Baseline reflects FOBT, FIT, sigmoidoscopy, colonoscopy]	66.2% BRFSS 2018	66.5% BRFSS 2020	74.4% HP2030 C-07		
8.2	Age-adjusted rate per 100,000 of invasive colorectal cancer incidence	36.5 CDRI 2018	34.2 CDRI 2019	29.2 CCAI (20%)		
8.3	Age-adjusted mortality rate, colorectal cancer	12.3 BVRHS 2019	11.2 BVRHS 2020 (Prelim Pops)	8.9 HP2030 C-06		

Local Data - Incidence

Colorectal - invasive/2019					
	Rate	Lower CI	Upper CI	Count	Rate Ratio
State of Idaho	34.2	31.6	36.8	712	
Health District 1	39.4	32.8	47.0	139	1.15
Health District 2	38.3	28.0	51.3	52	1.12
Health District 3	36.3	30.1	43.5	123	1.06
Health District 4	29.8	25.5	34.7	179	0.87
Health District 5	36.6	29.0	45.7	83	1.07
Health District 6	29.2	21.9	38.1	57	0.85
Health District 7	34.3	27.0	42.9	79	1.00

Local Data - Mortality

Colorectal/2020/Male and female					
	Rate	Lower CI	Upper CI	Count	Rate Ratio
State of Idaho	11.2	9.7	12.7	233	
Health District 1	9.8	6.7	14.0	34	0.88
Health District 2	10.3	5.5	17.9	15	0.93
Health District 3	13.3	9.7	17.8	46	1.19
Health District 4	9.4	7.0	12.3	55	0.84
Health District 5	9.6	6.1	14.6	24	0.86
Health District 6	17.3#	11.7	24.6	32	1.55
Health District 7	12.2	8.0	17.8	27	1.09

Goal 9: Reduce lung cancer deaths and rate of distant stage diagnosis through screening and early detection

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
9.1	Proportion of adults aged 55-80 who received a lung cancer screening based on the most recent guidelines (age adjusted to the year 2000 standard population)	16.2% BRFSS 2019 (see data notes)		19.4% CCAI (20%)		
9.2	Age-adjusted rate per 100,000 of lung cancer diagnoses at distant stage	23.9 CDRI 2018	22.0 CDRI 2019	21.5 CCAI (10%)		
9.3	Age-adjusted mortality rate, lung cancer	26.3 BVRHS 2019	26.3 BVRHS 2020 (Prelim Pops)	25.1 HP2030 C-02		

Local Data - Incidence

Lung - distant stage/2019					
	Rate	Lower CI	Upper CI	Count	Rate Ratio
State of Idaho	22.0	20.0	24.1	484	
Health District 1	27.1	22.0	33.3	103	1.23
Health District 2	33.1#	24.7	43.8	54	1.50
Health District 3	23.8	18.9	29.6	83	1.08
Health District 4	20.1	16.6	24.2	122	0.92
Health District 5	21.3	15.9	28.0	54	0.97
Health District 6	14.5#	9.8	21.0	30	0.66
Health District 7	15.9	11.2	22.0	38	0.72

Local Data - Mortality







Lung and Bronchus/2020/Male and female					
	Rate	Lower CI	Upper CI	Count	Rate Ratio
State of Idaho	26.3	24.2	28.5	588	
Health District 1	22.6	18.1	28.2	90	0.86
Health District 2	31.5	23.5	41.9	52	1.20
Health District 3	32.2	26.5	38.8	114	1.22
Health District 4	26.2	22.2	30.6	162	1.00
Health District 5	25.4	19.6	32.6	66	0.97
Health District 6	30.5	23.3	39.3	62	1.16
Health District 7	17.7#	12.7	24.0	42	0.67

Goal 10: Reduce prostate cancer deaths through close monitoring of early stage cases

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
10.1	Age-adjusted mortality rate, prostate cancer	19.6 BVRHS 2019	20.7 BVRHS 2020 (Prelim Pops)	16.9 HP2030 C-08		

Goal 11: Monitor the development and implementation of screening and early detection methods for other cancers

Goal 12: Increase timely access to quality cancer diagnostic and treatment services for all Idahoans

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
12.1	Percentage of Idaho adults aged 18-64 with health care coverage (age adjusted to the year 2000 standard population)	78.7% BRFSS 2019	82.7% BRFSS 2020	94.4% CCAI (20%)		
12.2	Percentage of Idahoans who could not see a doctor due to cost sometime in past year (age adjusted to the year 2000 standard population)	15.5% BRFSS 2019	11.1% BRFSS 2020	12.4% CCAI (20%)		
12.3	5-year relative survival ratio, adjusted for age and primary site mix (NAACCR cancer survival index)	64.6 CDRI 10-16	64.3 CDRI 11-17	66.2 HP2030 C-11		

Percentage of Idaho adults aged 18-64 with health care coverage

Region	Percent	Low95%CI	Up95%CI	n
PHD1	79.8	74.4	84.4	425
PHD2	85.7	81.4	89.2	458
PHD3	77.8	72.2	82.6	629
PHD4	86.0	82.3	89.0	653
PHD5*	75.9	70.8	80.3	491
PHD6*	88.9	85.2	91.7	541
PHD7	82.6	79.0	85.8	702

*Statewide prevalence (82.7%) not contained in district-level 95% CI

Goal 13: Increase opportunities to access and participate in cancer treatment clinical trials






Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
13.1	Percentage of cancer patients who enroll in treatment-related clinical trials	13.1%	3.2%	50.0%		
		Ages 0-19	Ages 0-19	Ages 0-19		
		4.2%	2.1%	5.0%		
		Ages 20+	Ages 20+	Ages 20+		
		CDRI 2018	CDRI 2019	CCAI		

Goal 14: Increase provider utilization of evidence-based treatment guidelines.


Objectives

- Promote awareness, education and advocacy efforts aimed at increasing the number of patients who receive high quality care.
- Monitor Idaho performance on American College of Surgeons Commission on Cancer (CoC) standards for Cancer Program Practice Profile Report (CP3R) treatment standards.

Goal 15: Improve the physical and mental health of cancer survivors

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
15.1	Percentage of cancer survivors who report poor physical health 14+ of last 30 days (age adjusted to the year 2000 standard population)	22.7% BRFSS 2018	16.3% BRFSS 2020	20.4% CCAI (10%)		✓
15.2	Percentage of cancer survivors who report poor mental health 14+ of last 30 days (age adjusted to the year 2000 standard population)	19.1% BRFSS 2018	11.5% BRFSS 2020	17.2% CCAI (10%)		✓
15.3	Percentage of cancer survivors who are current smokers (age adjusted to the year 2000 standard population)	26.2% BRFSS 2018	18.2% BRFSS 2020	23.6% CCAI (10%)		✓
15.4	Percentage of cancer survivors who report no physical activity outside of work (age adjusted to the year 2000 standard population)	25.7% BRFSS 2018	19.2% BRFSS 2020	23.1% CCAI (10%)		✓
15.5	Percentage of cancer survivors who report consuming 5+ servings fruit and vegetables per day (age adjusted to the year 2000 standard population)	13.4% BRFSS 2019		14.7% CCAI (10%)		

Goal 16: Improve access and referrals to palliative care services for cancer patients

Indicator	Measure	Baseline 2020	Update 2021	2030 Target	Progress towards target	Target Met
16.1	Proportion of cancer patients aged 66+ at diagnosis who received hospice care in 12 months prior to death	68.8% SEER-CMS 2007-2018 cases died 2018		75.7% CCAI (10%)		

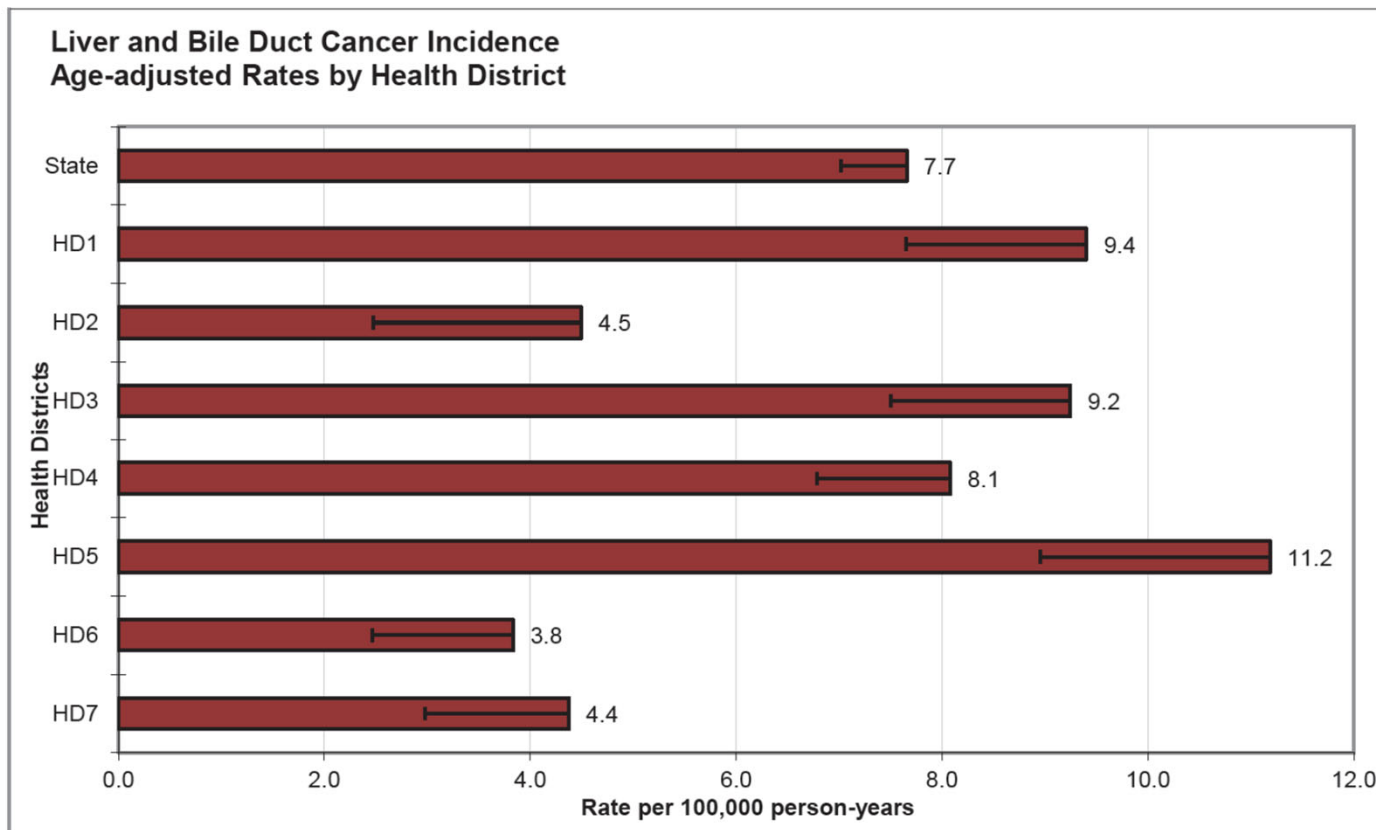
Sources for District-Level Data

<http://www.idcancer.org/statisticaldata>

1. CDRI Annual Reports
2. Geographic Reports
3. Pediatric Cancer Reports
4. County Cancer Profiles

CDRI Annual Reports

<http://www.idcancer.org/annualreports>



Geographic Reports

- “Incidence of Cancers Associated with Modifiable Risk Factors and Late Stage Diagnoses for Cancers Amenable to Screening”

Pediatric Cancer Reports

PEDIATRIC CANCER IN IDAHO 2008-2017

May 2020

A Publication of the



ACKNOWLEDGMENTS

The Idaho Hospital Association (IHA) contracts with, and receives funding from, the Idaho Department of Health and Welfare, Division of Public Health, to provide a statewide cancer surveillance system: the Cancer Data Registry of Idaho (CDRI).

The statewide cancer registry database is a product of collaboration among many report sources, including hospitals, physicians, surgery centers, pathology laboratories, and other states in which Idaho residents are diagnosed or treated for cancer. Their cooperation in reporting timely, accurate, and complete cancer data is acknowledged and sincerely appreciated.

CDRI would also like to thank the Division of Public Health, Idaho Department of Health and Welfare, and the Comprehensive Cancer Alliance for Idaho for their continued partnership and for using CDRI data as a tool in cancer control and prevention.

This report has been funded in whole or in part with Federal funds from the National Cancer Institute, National Institutes of Health, Department of Health and Human Services, under Contract No. HHSN2612018000061 and the Centers for Disease Control and Prevention, Department of Health and Human Services, under Cooperative Agreement 1NU58DP006270. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or the National Cancer Institute.

SUGGESTED CITATION:

Johnson C.J, Morawski BM, Rycroft RK. *Pediatric Cancer in Idaho, 2008-2017*. Boise, ID: Cancer Data Registry of Idaho; May 2020.

CANCER DATA REGISTRY OF IDAHO
P.O. Box 1278
Boise, Idaho 83701-1278
208-489-1380 (phone)
208-344-0180 (FAX)
<http://www.idcancer.org>



CDRI County Cancer Profiles

BLAINE COUNTY CANCER PROFILE

*A publication from the Cancer Data Registry of Idaho,
Idaho Hospital Association.*

**Cancer Incidence 2014–2018
Cancer Mortality 2015–2019
BRFSS 2011–2019**

CANCER

Cancer is a group of over 100 different diseases, each characterized by the uncontrolled growth and spread of abnormal cells. Cancer risk increases with age and varies by gender and race. As the average age of the population increases, the incidence of cancer will increase as well.

An estimated 42% of all cancers in the United States are due to personal lifestyle factors, such as smoking and sedentary lifestyle, and are preventable (10.3322/caac.21440). Cancers are also attributable to environmental factors and gene-environment interactions. Other non-modifiable factors, such as age, sex, and family history of specific cancers, are also associated with cancer risk and can help identify people at elevated risk for developing cancer.

For some cancers, early detection can save lives. For example, colorectal cancer screening reduces mortality in adults aged 50–75 years (10.1001/jama.2016.3332). Improved primary prevention, early detection, and effective treatment can reduce the burden of cancer in Idaho.

RISK FACTORS AND INTERVENTIONS

Aging:

As the population ages, the number of new cancer cases and cancer deaths that occur each year will continue to increase. This trend could be reversed through significant improvements in primary prevention, early detection, and treatment.

Smoking:

Smoking and the use of smokeless tobacco are responsible for most cancers of the lung, trachea, bronchus, larynx, pharynx, oral cavity, and esophagus. Smoking is the leading cause of preventable death in the United States (PMID: 24455788).

Diet:

The U.S. Departments of Agriculture and Health and Human Services recommend the following dietary guidelines: eat a variety of foods; choose a diet with plenty of fruits, vegetables, and whole-grain products; limit the use of sugar, salt, and solid fats; and minimize alcoholic beverage consumption. For details, see <https://www.dietaryguidelines.gov>.

Screening:

Early detection through screening reduces morbidity and mortality for cancers that can be diagnosed early and treated.

FOR MORE INFORMATION

Cancer Data Registry of Idaho
P.O. Box 1278
Boise, ID 83701
208-489-1380
<https://www.idcancer.org>

National Cancer Institute
Cancer Information Services
1-800-4CANCER
<https://www.cancer.gov/contact/contact-center>

American Cancer Society
<https://www.cancer.org>

Blaine County

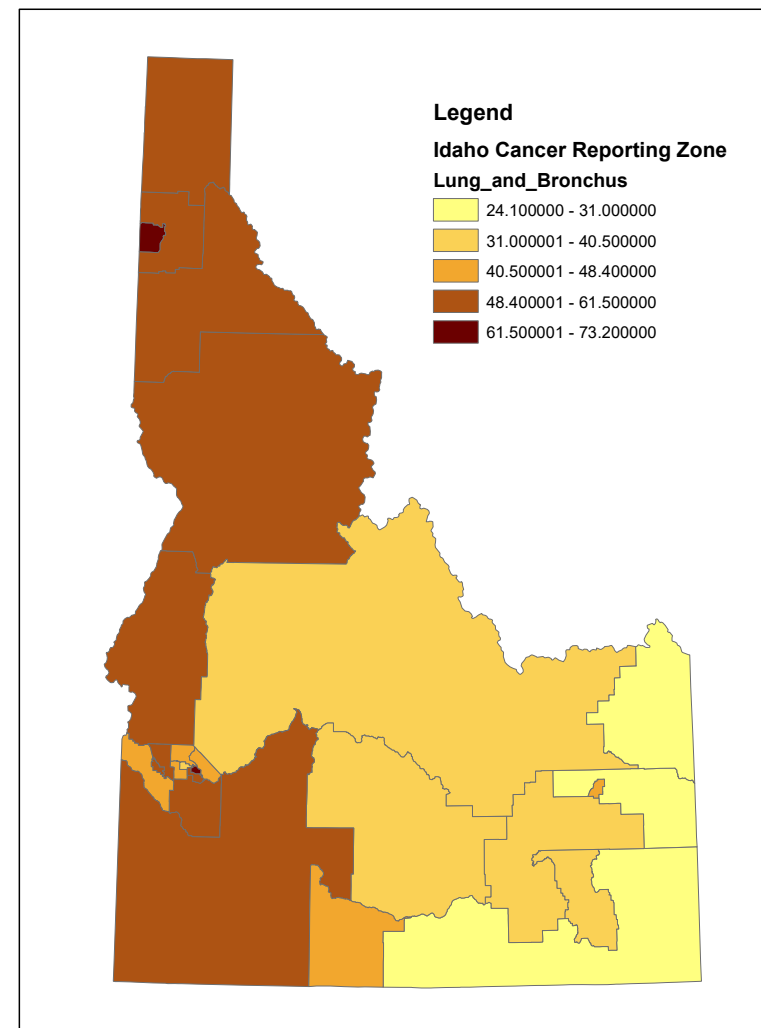
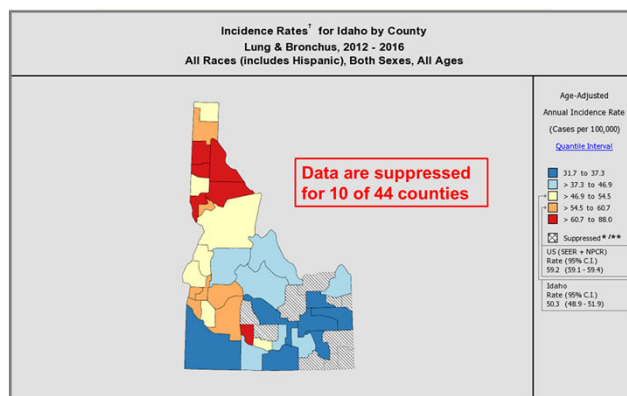
- 588 cases 2014-2018
 - Significantly different than expected
 - Colorectal –
 - Lung & Bronchus –
 - Melanoma of the Skin +
- 144 cancer deaths 2015-2019
 - Significantly fewer than expected
 - Colorectal –
 - Esophagus –
 - Lung & Bronchus –

Blaine County

- Lower rate of health care coverage, lower proportion who could not see doctor due to cost
- Higher colorectal cancer screening rates
- Much lower smoking rate
- Much higher proportion healthy body weight, meeting physical activity guidelines
- Much higher rate home radon testing

Lung & Bronchus Incidence 2013-2017 By Idaho Cancer Reporting Zone

- Rates ranged from 24.1 – 73.2 cases per 100k
- Max/Min = 3.04



Questions?

cjohnson@teamiha.org