Rhode Island Cancer Registry & Rhode Island Cancer Statistics

Victoria Fruh, MPH, PhD Rhode Island Cancer Registry Program Director

October 16, 2024

Quick Cancer Facts, RI

- 6,337 new cancer cases
- 2,091 cancer deaths
- 2nd most common cause of death
- As of 2017, 5-6% of Rhode Islanders with a history of cancer or a new cancer diagnosed §

Source – 2021 U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; https://www.cdc.gov/cancer/dataviz, released in June 2024.

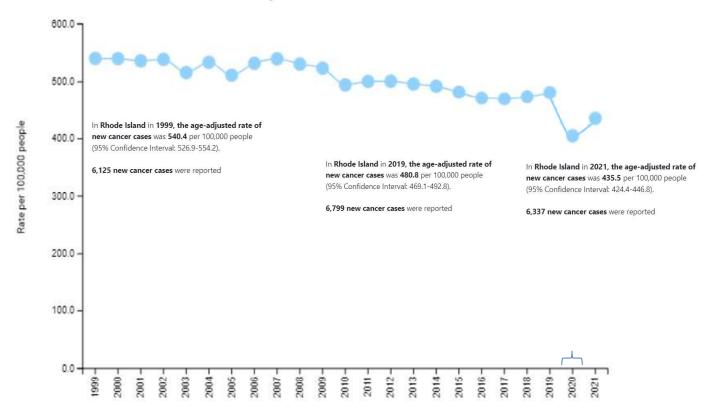
† Deaths: Final Data for 2015. National Vital Statistics Reports Vol 66(6). https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66 06.pdf

https://statecancerprofiles.cancer.gov/index.html

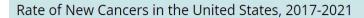


[§] Prevalence Projections Report by State. State Cancer Profiles. National Cancer Institute.

Annual Rates of New Cancers, 1999-2021 Rhode Island, All Types of Cancer, Male and Female, All Races and Ethnicities

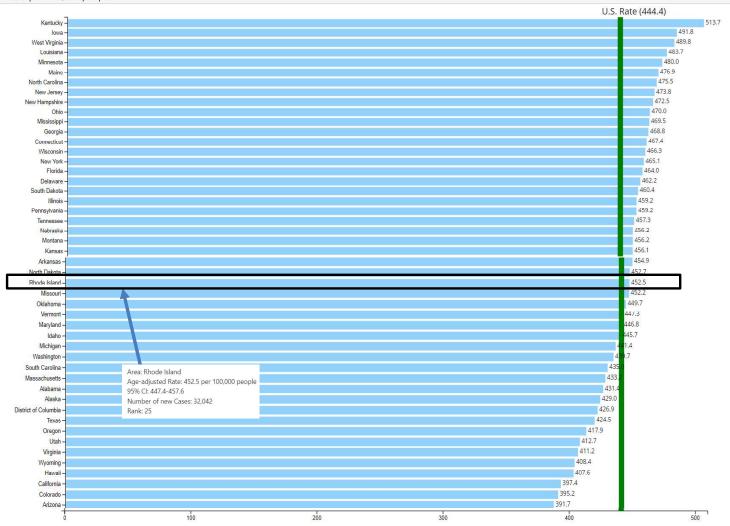


Source - U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; https://www.cdc.gov/cancer/dataviz, released in June 2024.



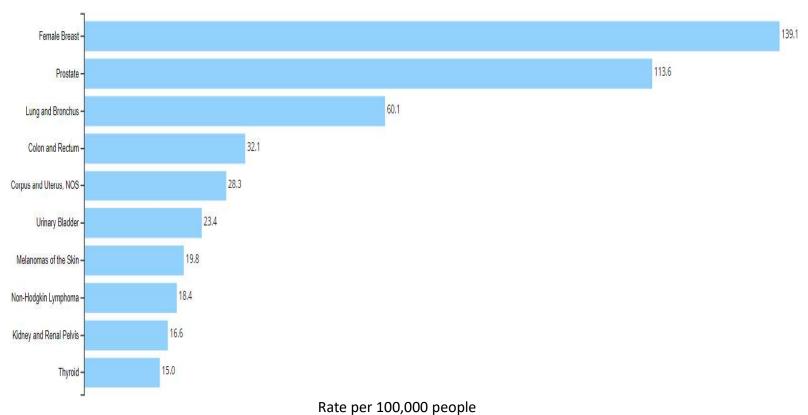
All Types of Cancer, All Ages, All Races and Ethnicities, Male and Female Rate per 100,000 people

All Types of Cancers, Comparing State Rates



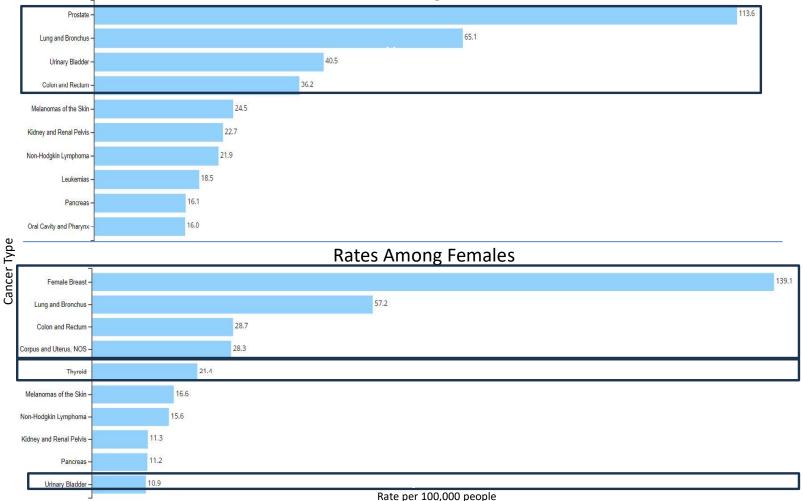
Top 10 Cancers by Rates of New Cancer Cases Rhode Island, 2017-2021, All Races and Ethnicities, Male and Female

Rate per 100,000 people



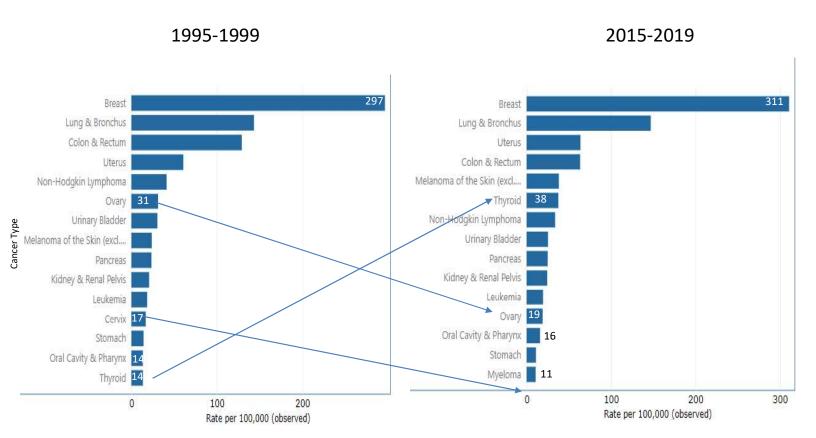
Top 10 Cancers by Rates of New Cancer Cases Rhode Island, 2017-2021, Rate per 100,000 people

Rates Among Males



Top 15 Cancers by Rates of New Female Cancer Cases, Rhode Island, Rate per 100,000 people (40+ years old)

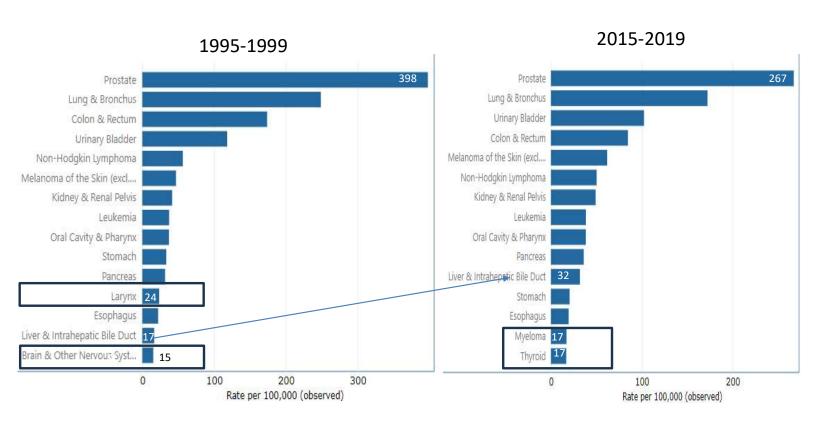
Over time



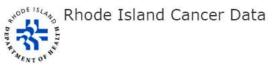
Source: Rhode Island Cancer Registry, summarized using SEER*Stat v8.4.0.

Top 15 Cancers by Rates of New Male Cancer Cases, Rhode Island, Rate per 100,000 people (40+ years old)

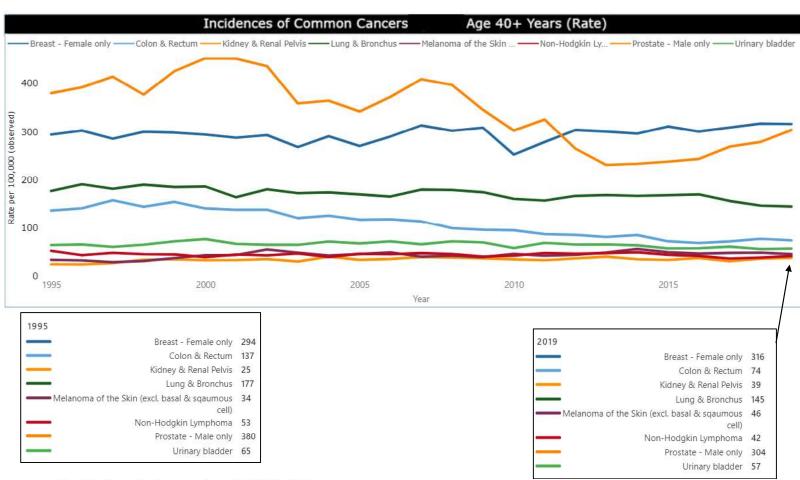
Over time



Source: Rhode Island Cancer Registry, summarized using SEER*Stat v8.4.0.





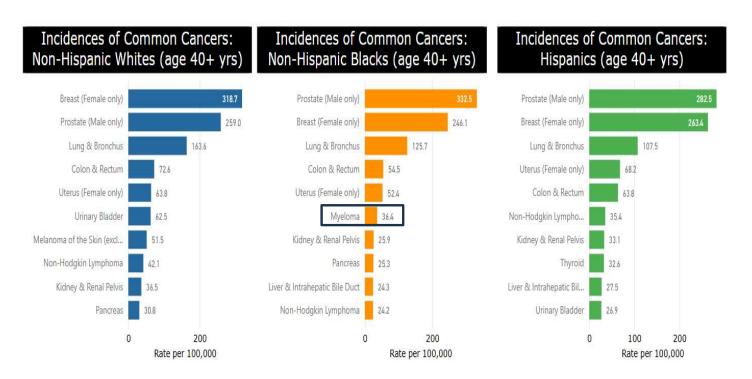


Source: Rhode Island Cancer Registry, summarized using SEER*Stat v8.4.0.

Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard. See more technical notes in Data Table.

Top Cancers by Rates of New Cancer Cases (40+ years)

Rhode Island, 2015-2019 Rate per 100,000 people



Key Findings:

The ranking of highest cancer incidence rates remain fairly similar when comparing Non-Hispanic Whites, Non-Hispanic Blacks, and Hispanics, although some differences can be seen between groups when looking at the 5 different year groups.

Source: Rhode Island Cancer Registry, summarized using SEER*Stat v8.4.0.

Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130).

Top 10 Cancers are included in this report, but due to lower populations of minorities' (Non Hispanic-Blacks and Hispanics), 10 cancer sites

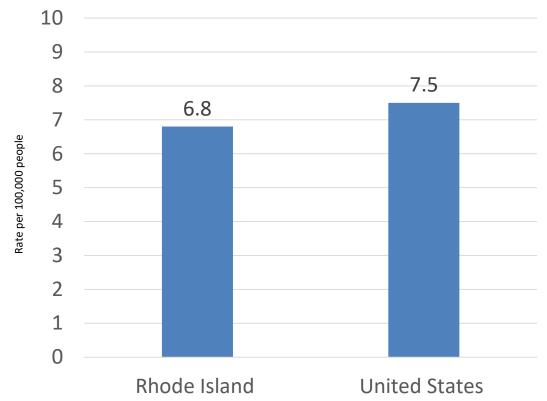
are not necessarily listed, when (1) count of cases <15, and (2) >30% RSE. See more technical notes in Data Table.

Cancer Types Rhode Island and U.S.

Rate of New Cancers, All Races and Ethnicities, Female

Cervix, 2017-2021 Rate per 100,000 women

Cervical Cancer (Females)

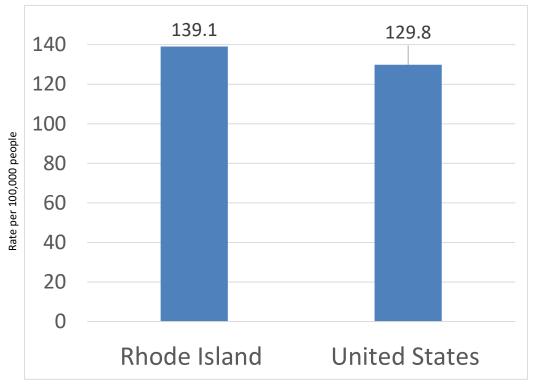


Rate per 100,000 people

Rate of New Cancers, All Races and Ethnicities, Female

Female Breast, 2017-2021 Rate per 100,000 women

Breast Cancer (Females)

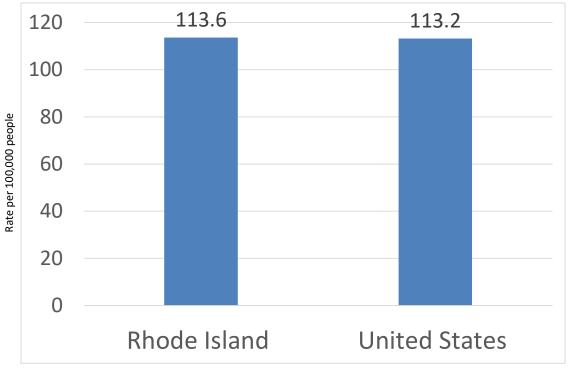


Rate per 100,000 people

Rate of New Cancers, All Races and Ethnicities, Male

Prostate, 2017-2021 Rate per 100,000 men

Prostate (Males)

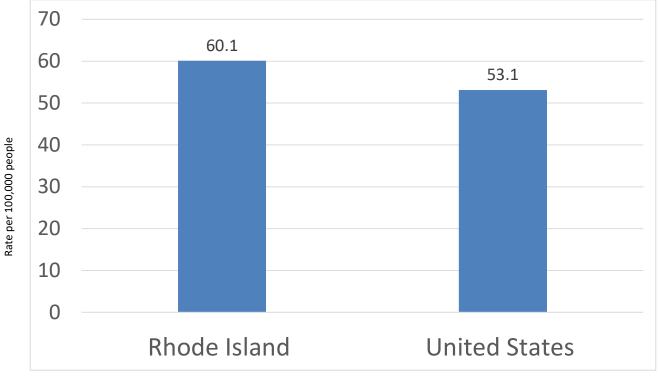


Rate per 100,000 people

Rate of New Cancers, All Races and Ethnicities, Both Sexes

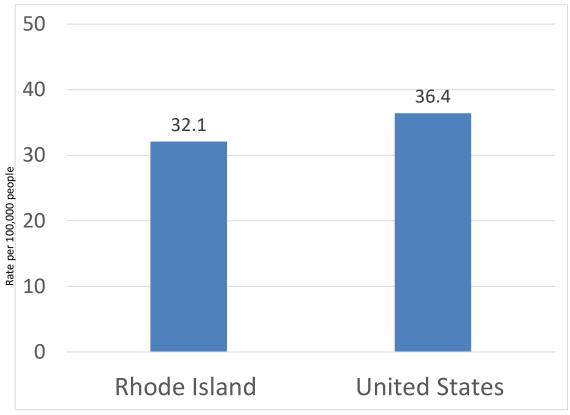
Lung and Bronchus, 2017-2021 Rate per 100,000 people

Lung and Bronchus



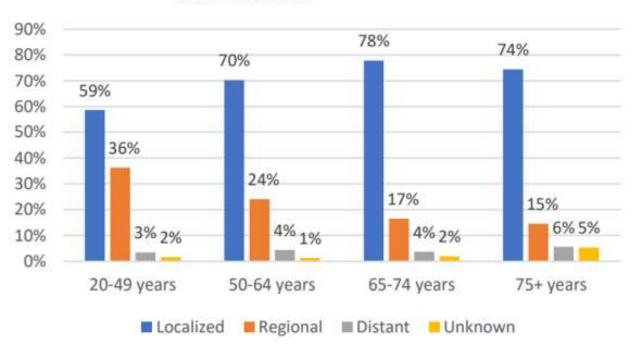
Rate per 100,000 people

Rate of New Cancers, All Races and Ethnicities, Both Sexes Colon and Rectum, 2017-2021 Rate per 100,000 people Colon and Rectum



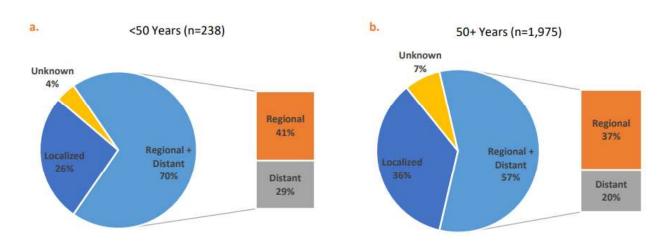
Rate per 100,000 people

Stage at Breast Cancer Diagnosis by Age Group, RICR 2016-2020



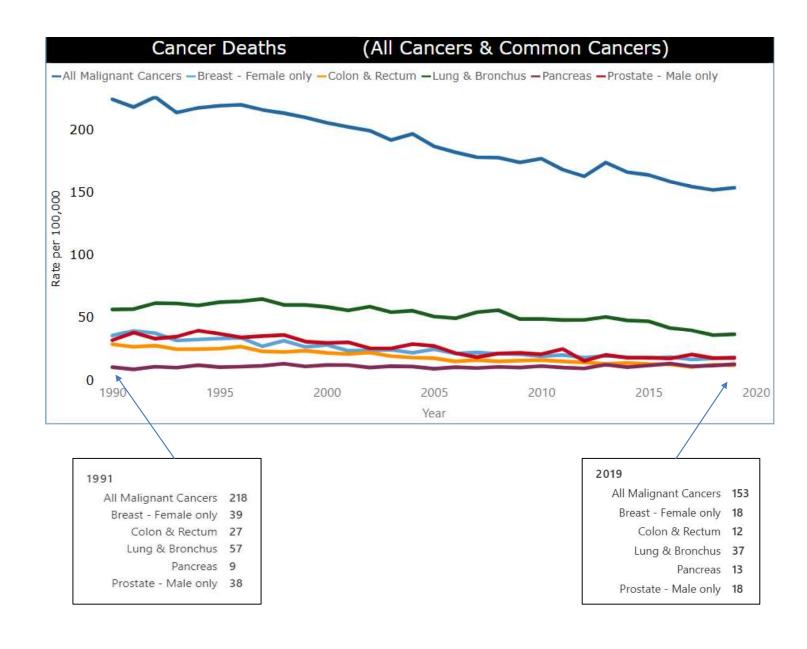
Figures include breast cancer cases among Rhode Island women. Source: Rhode Island Cancer Registry (RICR). Cancer staging terminology: At localized stage, the cancer is confined to a primary site; in the regional stage the cancer has spread to regional lymph nodes; in the distant stage, cancer has metastasized

Figure 3. Stage at Colorectal Cancer Diagnosis by Age in Rhode Island, RICR 2016-2020



For individuals <50 years old (0-49 years), 70% of cases were diagnosed in the regional or distant stages (*Figure 3a*). For individuals 50 or older, 57% of cases were diagnosed in the regional or distant stages (*Figure 3b*). Figure 3 includes cases among both males and females in Rhode Island.

Cancer staging terminology: 9 In the localized stage, the cancer is confined to the primary site. In the regional stage, the cancer has spread directly beyond the primary site or to regional lymph nodes. In the distant stage, the cancer has spread to other organs or remote lymph nodes. Source: Rhode Island Cancer Registry (RICR).



RICR Reports/Publications



Cancer Registry: Department of Health (ri.gov)

Program Publications

Data

- * 2024 The Burden of Breast Cancer in Rhode Island (2024)
- * 2024 The Burden of Colorectal Cancer in Rhode Island (2024)
- * 2020 The Burden of Colorectal Cancer in Rhode Island (2020)
- # 2020 The Burden of Liver and Intrahepatic Bile Duct Cancer in Rhode Island (2020)
- # 2020 The Burden of Lung Cancer in Rhode Island (2020)
- # 2020 The Burden of Ovarian Cancer in Rhode Island (2020)
- * 2020 The Burden of Pancreatic Cancer in Rhode Island (2020)

Periodical

- Cancers Associated with Overweight and Obesity among Rhode Island Adults, 1995-2016. RI Medical Journal, 102(4), 40-43 *(2019)*
- 🖁 Childhood Cancer in Rhode Island. Rhode Island Medical Journal, 102(1), 46-49 (2019)
- Increasing Trend of HPV-Associated Oropharyngeal Cancers among Males in Rhode Island, 1987-2011. Rhode Island Medical Journal, 95(5), 47-49 (2014)
- Rhode Island Lung Cancer Incidence and Stage at Diagnosis, by Histologic Subtype, 2004-2015. Rhode Island Medical Journal, 101(5), 50-53 (2018)
- Trend in Thyroid Cancer Incidence among Rhode Island Adults, 1995–2016. Rhode Island Medical Journal, 102(7), 57-60 (2019)



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Improving the Quality of Life of Cancer Survivors through Comprehensive Cancer Control: Sharing NCCCP Overview and Coalition-based Examples

Nikki Hayes, MPHChief, Comprehensive Cancer Control Branch
Division of Cancer Prevention and Control

Rhode Island Cancer Summit
October 2024



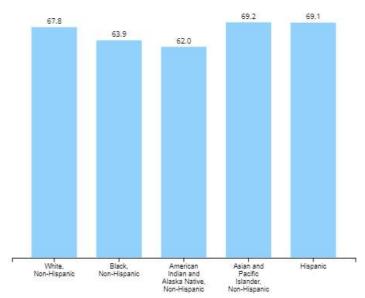


Cancer is the 2nd leading cause of death in the U.S.

- In 2022, 608,366 people died from cancer. One is 5 deaths in the US is due to cancer.
- In 2022, 2091 Rhode Islanders died from cancer.
- Lung cancer was the most common cause of cancer death among men and women in Rhode Island. Prostate cancer and breast cancer deaths are the second leading causes of death among men and women in Rhode Island, respectively.



5-year Relative Survival (%) by Race and Ethnicity, Both Sexes All Types of Cancer, United States



Source - U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; https://www.cdc.gov/cancer/dataviz, released in June 2024.

Living With Cancer



Regardless of the type of cancer, or the extent of survival, all persons diagnosed with cancer must manage the enduring and complex ways in which cancer transforms the self and everyday life.

Betsy Clark, former president Ellen Stovall, former executive director National Coalition for Cancer Survivorship

Improving Health And Wellbeing in Cancer Survivors

Pain Among Cancer Survivors

M Shayne Gallaway ¹, Julie S Townsend ², Daniel Shelby ³, Mary C Puckett ²

Health behaviors and quality of life of cancer survivors in Massachusetts, 2006: data use for comprehensive cancer control

Temeika L Fairley ¹, Helen Hawk, Snaltze Pierre

Current depression among adult cancer survivors: findings from the 2010 Behavioral Risk Factor Surveillance System

Guixiang Zhao 1 , Catherine A Okoro 2 , Jun Li 3 , Arica White 3 , Satvinder Dhingra 4 , Chaoyang Li 5

Health status of adolescent and young adult cancer survivors

Eric Tai ¹, Natasha Buchanan, Julie Townsend, Temeika Fairley, Angela Moore, Lisa C Richardson

Persistent cigarette smoking and other tobacco use after a tobacco-related cancer diagnosis

J Michael Underwood ¹, Julie S Townsend, Eric Tai, Arica White, Shane P Davis, Temeika L Fairley

Food insecure cancer survivors continue to smoke after their diagnosis despite not having enough to eat: implications for policy and clinical interventions

Hermine Poghosyan ¹, Samuel V Scarpino ²

Survivorship care plans and time since diagnosis: factors that contribute to who breast cancer survivors see for the majority of their care

Kara P Wiseman ¹, Diane L Bishop, Qin Shen, Resa M Jones

Psychological distress among adult cancer survivors: importance of survivorship care plan

S Cristina Oancea ¹, Vinay K Cheruvu ²

Factors associated with physical inactivity in adult breast cancer survivors-A population-based study

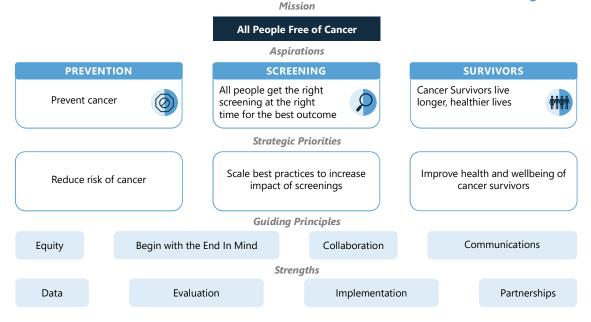
Salam A Huneidi $^{\rm 1}$, Nicole C Wright $^{\rm 1}$, Arnisha Atkinson $^{\rm 1}$, Smita Bhatia $^{\rm 2}$, Purnima Singh $^{\rm 2}$

Disparities in Cancer Survivorship Indicators in the Deep South Based on BRFSS Data: Recommendations for Survivorship Care Plans

Renee A Desmond ¹, Bradford E Jackson ¹, John W Waterbor ¹

Strategic Priority Framework



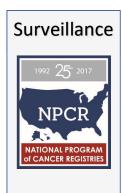


7

CDC/DCPC Focused Cancer Survivor Work









Health Promotion











Medscape Wednesday, October 26, 2016



Improving Care for People With Cancer

Patient Navigation and Community Health Workers Provide Coordinated, Person-Centered Care

- Professional standards
- Training and Education
- System Design and Testing
- Technical Assistance
- Tools & Resources



Graphic: CDC, Using Project ECHO and Patient Navigation to Improve the Health and Wellness of Cancer Survivors in Rural Communities

Supporting Long-term Survival: *Examining the Impact of Cancer Care Plans*



Receipt of cancer care plans associated with (preliminary findings):

- Lower death rates in pediatric cancer survivors
- Greater use of recommended screenings for side effects associated with premature death
 - Cardiovascular and pulmonary diseases
 - Second cancers

Educational Tools for Cancer Patients

Linda Avatar TINA Avatar

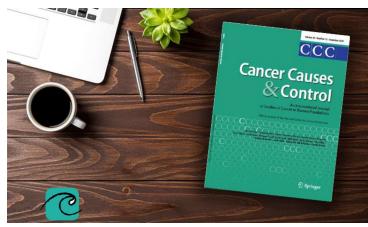


https://simulations.kognito.com/tnbc/



https://www.preventcancerinfections.org/talkwithtina/

National Comprehensive Cancer Control Program: Collaborating to Conquer Cancer



NATIONAL

Comprehensive Cancer Control

PROGRAM

Collaborating to Conquer Cancer

Supports cancer coalitions in all 50 states, the District of Columbia, 8 U.S. territories and Pacific Island Jurisdictions, and 7 tribes or tribal organizations to create and implement cancer plans that focus on:

- Risk Reduction
- Early Detection
- Better Treatment
- Improved Quality of Life for Survivors
- Advancing Equity in Cancer Health Outcomes



NCCCP Supplemental Funding: Cancer survivorship initiatives to expand evidence-based cancer survivorship programs through enhanced community-clinical partnerships

- Supplement to NCCCP awardees to accelerate program efforts to improve the quality of life of cancer survivors
- Up to \$25,000 supplemental awards
- · Optional Activities:
 - Partner to implement ECHO telementoring and patient navigation activities to enhance care for survivors in rural communities
 - · Partner to increase survivor support networks
 - Partner to expand best practices to improve the quality of life of ovarian cancer survivors



NCCCP Recipients and Coalitions Can...

- Gather and share burden data to increase awareness among decision-makers, partners, and the public about the people who are most impacted by cancer in their communities.
- Plan and promote opportunities to improve the quality of life of cancer survivors.

Work with partners to:

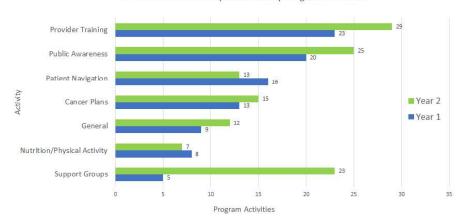
- Assess the needs of cancer survivors in their communities. Develop and implement appropriate cancer plan goals and strategies to improve the quality of life of cancer survivors, especially in communities with higher burden and poorer outcomes.
- 2. Convene appropriate partners, ensuring appropriate representation.
- 3. Identify resources to implement plan priorities to impact quality of life for cancer survivors.
- 4. Promote general resources for cancer survivors.

Work with partners to:

- 6. Increase awareness related to cancer survivor needs.
- 7. Provide support for patient navigation.
- 8. Create, promote and sustain survivor support networks.
- 9. Support provider training and education.
- 10. Promote community-clinical linkages to increase access to and support for physical activity and healthy nutrition options.

NCCCP Survivorship Activities





NCCCP Program Examples



Program Site







Patient Navigators



Cancer Survivors

Using Project ECHO and Patient Navigation to Improve Care for Cancer Survivors in Rural Areas

- RI activity to implement Project ECHO's telementoring platform and engage patient navigators to enhance care for cancer survivors in rural areas.
- Task Force composed of survivors, providers and other stakeholders.
- Survivors Teaching Students Program
- RIDOH Ovarian Cancer **Resources Tool Kit**

The Partnership to Reduce Cancer in Rhode Island

- Partnering with the Rhode Island Department of Corrections, the Rhode Island Breast and Cervical Cancer Early Detection Program, and others to increase lung cancer screening among incarcerated adults.
- Low-dose computed tomography screenings





Rhode Island Cancer and Oral Health Resource Guide

- Oral health information for patients going through cancer treatment
- Providers
- Patients and Caregivers



Critical Partnerships

- Partner with community members to address disparities in cancer health outcomes and care.
- RI collaboration with the Ministers Alliance of Rhode Island
- Focuses on increasing awareness of risk factors, encouraging screening, and supporting survivors

Thank you!

Go to the official federal source of cancer prevention information: www.cdc.gov/cancer





Division of Cancer Prevention and Contro

Reliable. Trusted. Scientific.

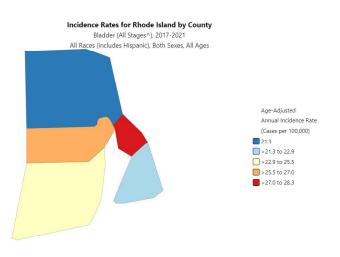
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



Cancer: Unlocking the Code in the Cell, Clinic, and Community

Partnership to Reduce Cancer Rhode Island Annual Cancer Summit October 16, 2024 Sheldon L. Holder, MD, PhD

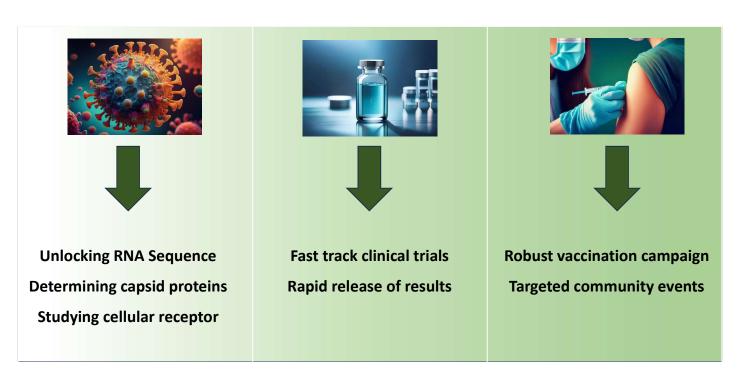
Cancer in Rhode Island



statecancerprolifes.cancer.gov

Age-Adjusted Incidence Rates by Cancer Site, All Stages (2017-2021)	Rhode Island Rate	USA Rate
All Cancer Sites	452.5	444.4
Bladder	23.4	18.8
Brain & ONS	6.7	6.3
Breast (Female)	139.1	129.8
Breast (in situ) (Female)	37.6	29.3
Cervix (Female)	6.8	7.5
Esophagus	5.1	4.5
Kidney & Renal Pelvis	16.6	17.3
Leukemia	14.1	14.1
Liver & Bile Duct	8.6	8.6
Lung & Bronchus	60.1	53.1
Melanoma of the Skin	19.8	22.7

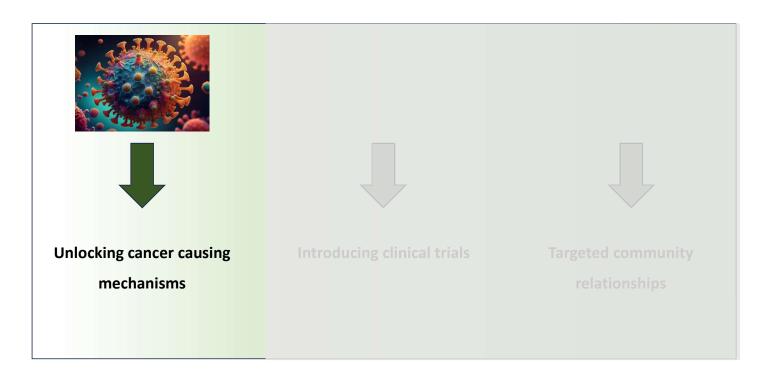
Large Problems Require Large Solutions



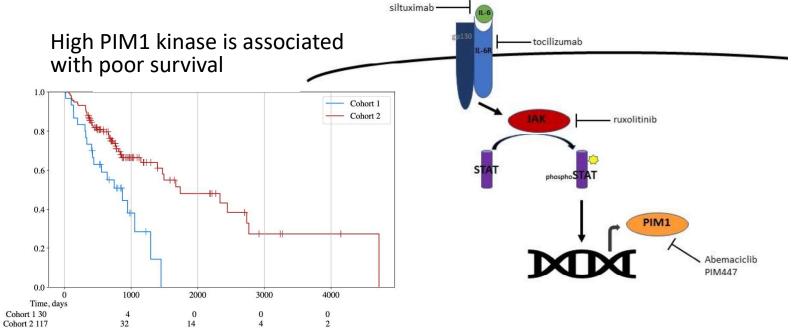
Large Problems Require Large Solutions



The Cell



Kidney Cancer





The Clinic

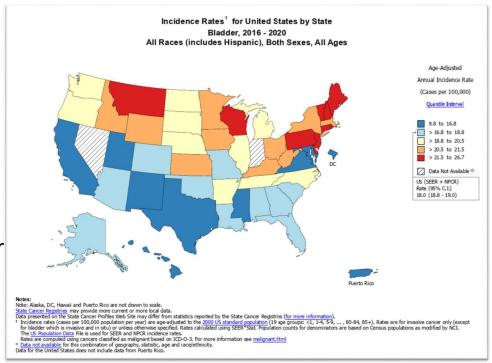


Bladder Cancer

- RI 3rd highest incidence in nation
- Men 3x > women
- Some men and women express testosterone receptor

Clinical trial

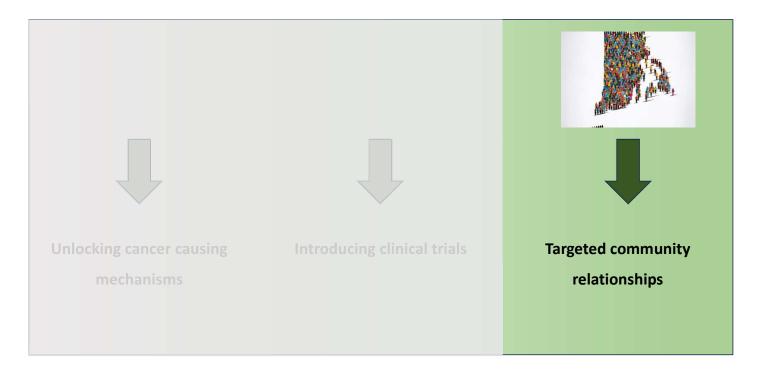
- Standard chemotherapy
- Plus: testosterone reduction
- Open and available only in RI





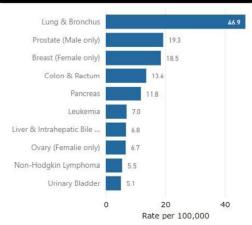


The Community

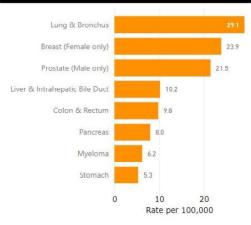




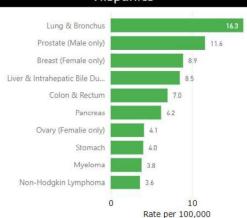
Common Causes of Cancer Deaths: Non-Hispanic Whites



Common Causes of Cancer Deaths: Non-Hispanic Blacks



Common Causes of Cancer Deaths: Hispanics



Key Findings:

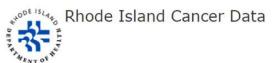
- Cancer is the second leading cause of death in Rhode Island. Lung and Bronchus, Colon and Rectum, Breast, Pancreas, and Prostrate represent some cancers with the highest mortality rates in male and female Rhode Islanders even when separated by racial/ethnic groups. The ranking of highest mortality cancers differ in some cases between the 3 racial/ethnic groups presented here.

Source: Rhode Island Vital Records & CDC NCHS, summarized using SEER*Stat v8.3.6.

Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130). Top 10 Cancers are included, but due to lower populations of minorities' (NHB and Hisp), the data does not necessarily list 10 cancer sites when (1) count of cases is less than 15, and (2) >30% RSE. See more technical notes in Data Table







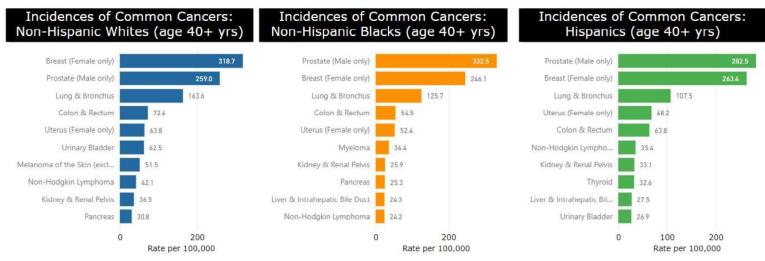
 Sex (age 40+ years)
 Year

 Female
 1995-1999

 Male
 2000-2004

 Male and Female
 2005-2009

 2010-2014
 2015-2019



Key Findings:

- The ranking of highest cancer incidence rates remain fairly similar when comparing Non-Hispanic Whites, Non-Hispanic Blacks, and Hispanics, although some differences can be seen between groups when looking at the 5 different year groups.

Source: Rhode Island Cancer Registry, summarized using SEER*Stat v8.4.0.

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Top 10 Cancers are included in this report, but due to lower populations of minorities' (Non Hispanic-Blacks and Hispanics), 10 cancer sites are not necessarily listed, when (1) count of cases <15, and (2) >30% RSE. See more technical notes in Data Table.





What is the best way to treat a cancer patient?

"NCCN believes that the best management for any patient with cancer is in a clinical trial."

- National Comprehensive Cancer Network (NCCN) Treatment Guidelines

Diversity in Cancer Clinical Trials is Poor

20193,593 patients11 new oncology drugs

4% Black 5% Latinx 8% Asian

73% White

20223,516 patients11 new oncology drugs

3% Black (115) 4% Latinx (138)

U. S. Food and Drug Administration. 2022 Drug Trials Snapshots Summary

20234,504 patients13 new oncology drugs

2% Black (84) 5% Latinx (215)

U. S. Food and Drug Administration. 2023 Drug Trials Snapshots Summary

U. S. Food and Drug Administration. 2019 Drug Trials Snapshots Summary Report. https://www.fda.gov/media/135337/download

Effective Community Engagement requires...

- cultural competence
- trust-building
- meaningful collaboration between stakeholders, including community leaders, healthcare providers, researchers, and policymakers

Kale S, Hirani S, Vardhan S, Mishra A, Ghode DB, Prasad R, Wanjari M. Addressing Cancer Disparities Through Community Engagement: Lessons and Best Practices. Cureus. 2023 Aug 14;15(8):e43445. doi: 10.7759/cureus.43445. PMID: 37711952; PMCID: PMC10498131.



Our Initiatives:

OPENCommunity Advisory Board









OPEN

Outreach and Participatory Engagement kNowledge Board

- Plan and execute interventions to improve relationship between Legorreta Cancer Center and Communities of Color
- Composed of individuals from all walks of life (Police Officer, Local DJ, Local non profit leaders, etc.)



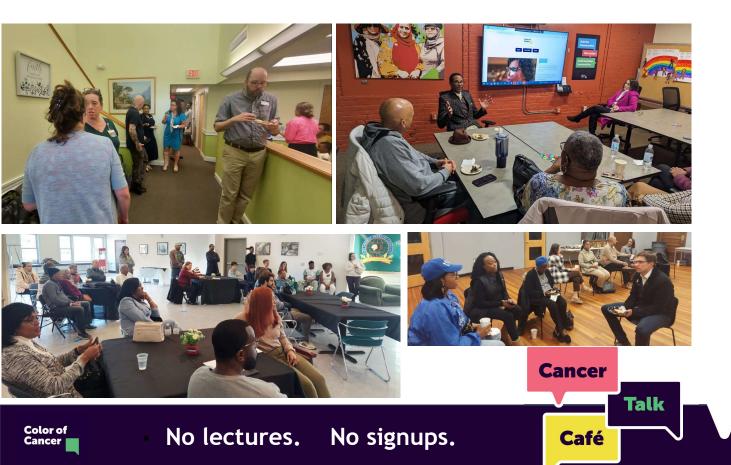
Color of Cancer



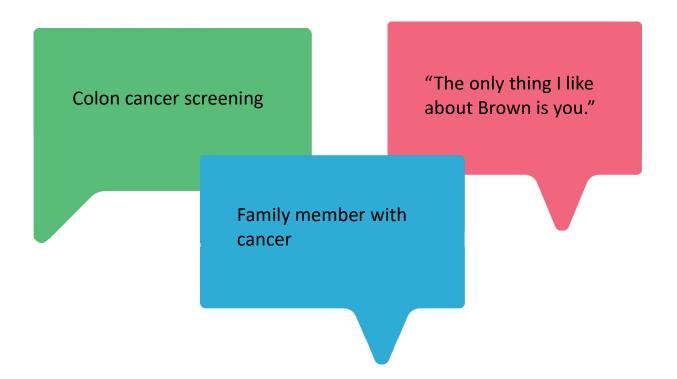
Color of Cancer

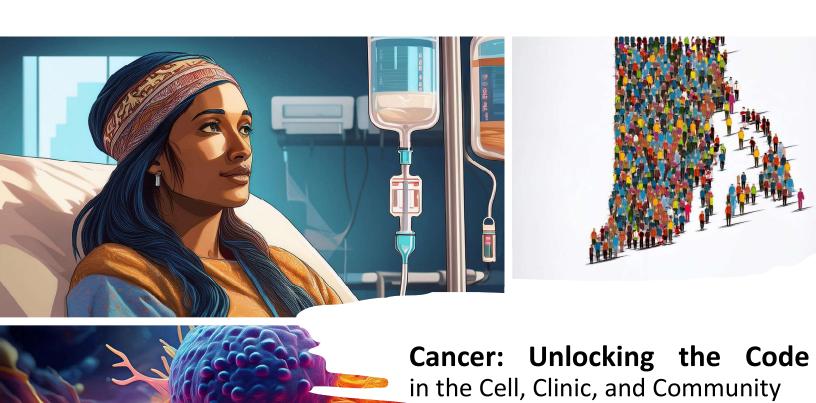
www.colorofcancer.live

Color of Cancer Trailer



IMPACT





Empowering Cancer Survivors and Oncology Professionals through Stress Management

Dr. Wendy Garvin Mayo, DNP, APRN, ANP-BC



CANCER FACTS

- •1,958,310 **new cancer** cases
- •~18.1 million cancer survivors
- By 2040, ~ 26 million people will be living
 with and beyond cancer in the US

MENTAL HEALTH & CANCER SURVIVORS



CANCER AND MENTAL HEALTH

Post-treatment cancer patients who have no evidence of disease often experience some form of emotional

60%

of those in distress were NOT referred to a mental health professional by their cancer care team 40%



who wanted mental health support did NOT receive it

Cancer Support Community (2022). Cancer Experience Registry Spotlight Survey: Identifying Barriers to Accessing Mental Health Care among Cancer Patients and Survivors [Unpublished data; August 2021]

www.collaborativecancercare.com



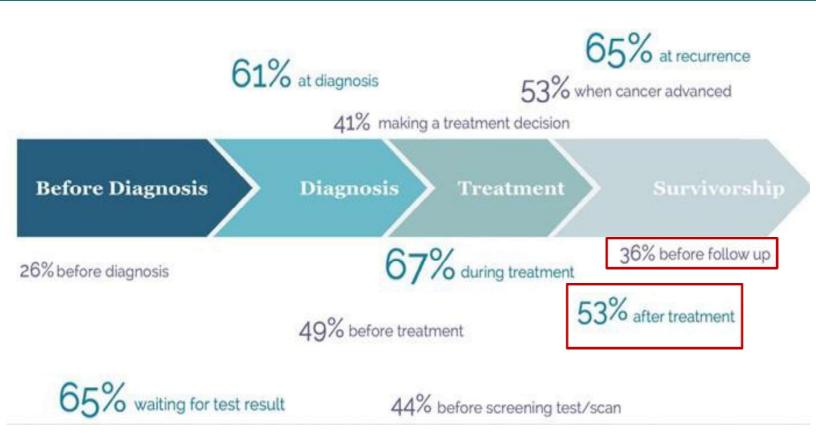




SHAPE FRAMEWORK



DISTRESS DURING THE JOURNEY

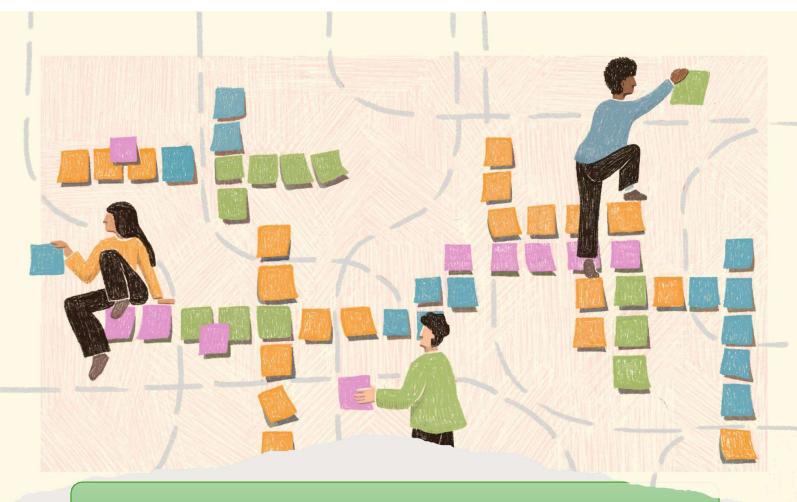


STRESS & MENTAL HEALTH IN ONCOLOGY PROFESSIONALS

- 30% of Oncology Nurses reported emotional exhaustion
- 63% of Oncology Nurses experience burnout
- 20% of Oncologists reported anxiety and depression
- 27% of Surgical Oncologist reported anxiety and depression

REFERENCES

- Cancer Support Community (2022). Cancer Experience Registry
 Spotlight Survey: Identifying Barriers to Accessing Mental Health Care
 among Cancer Patients and Survivors [Unpublished data; August 2021]
- Granek L, Nakash O. Oncology Healthcare Professionals' Mental Health during the COVID-19 Pandemic. Curr Oncol. 2022 Jun 2;29(6):4054-4067. doi: 10.3390/curroncol29060323. PMID: 35735432; PMCID: PMC9222050.
- Mayo Garvin, W. (2023) SHAPE Your Life: 5-Step Blueprint for Sustainable Stress Management
- Siegel RL, Miller KD, Wagle NS, Jemal A. Cancer statistics, 2023. CA
 Cancer J Clin. 2023 Jan;73(1):17-48. doi: 10.3322/caac.21763. PMID: 3 6633 52 5.



Gathering data faster for timely use

Currently: 24-month delay



Too many items to collect



Standard requirements



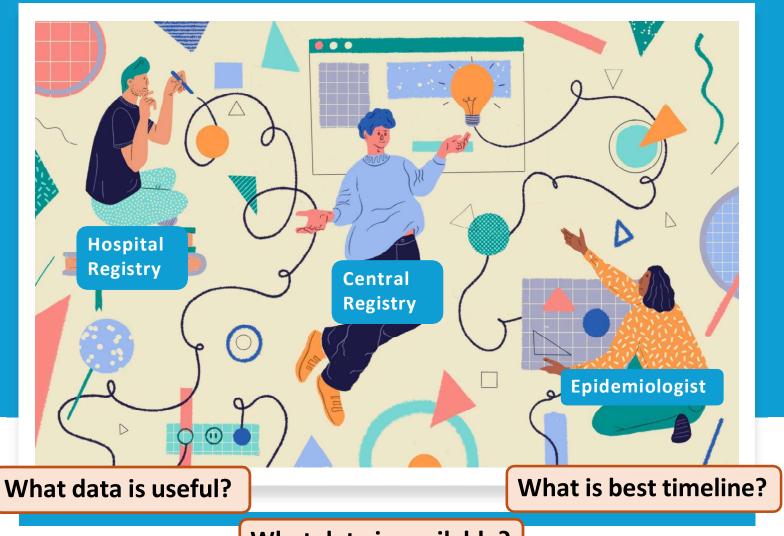
Lack of staff



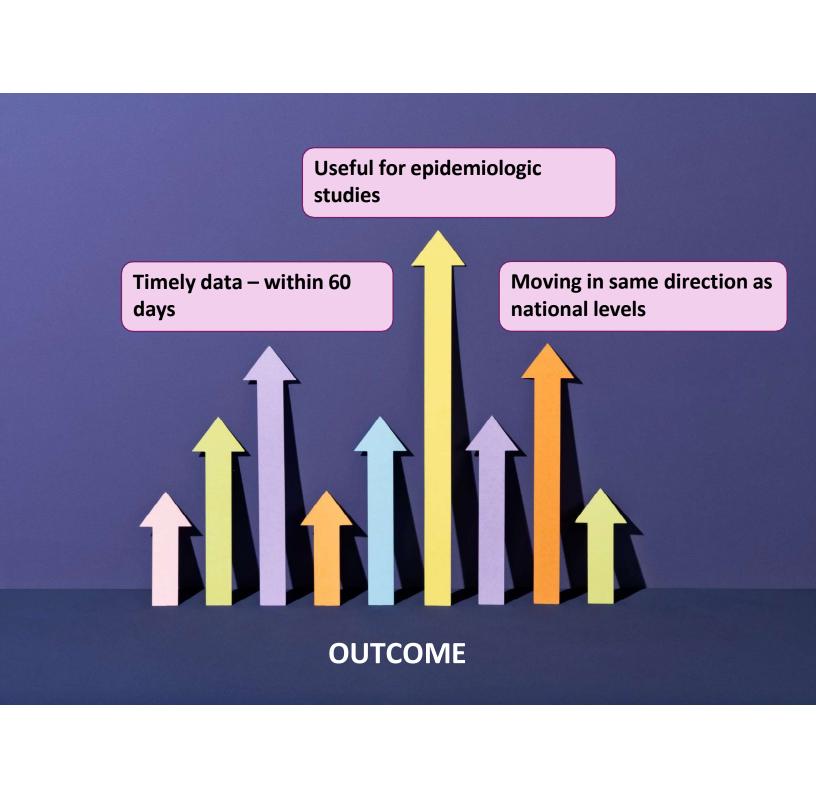
Waiting for treatment



COLLABORATE FOR NEW PLAN



What data is available?



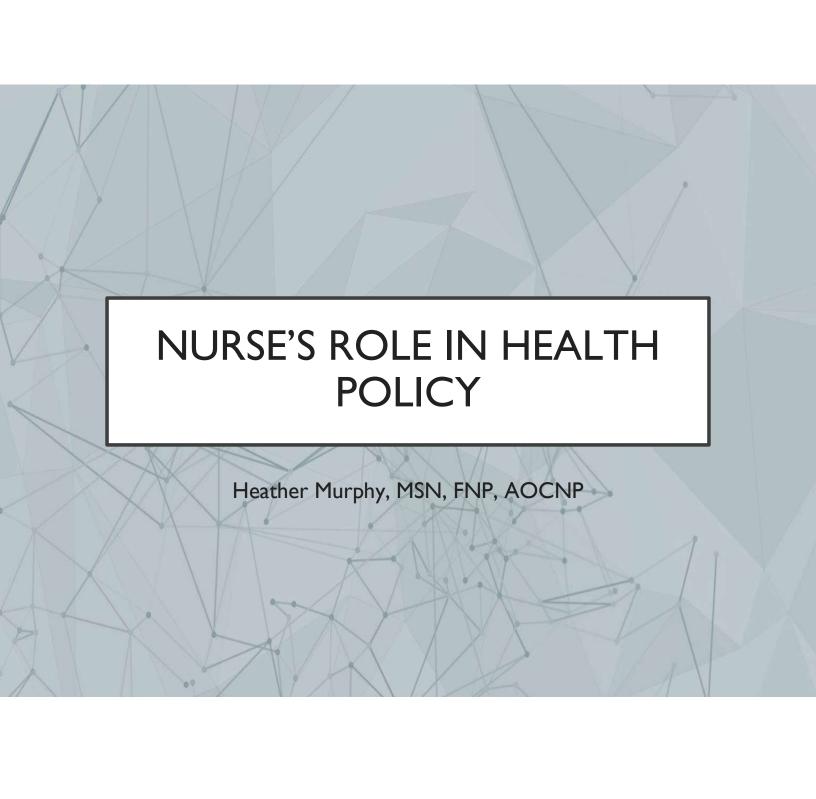
THANK YOU!

Nancy Lebrun, BS, ODS-C Hospital Association of RI/RI Cancer Registry 405 Promenade St. Suite C Providence, RI 02908 nancyl@hari.org; 401-651-1764





We acknowledge the Centers for Disease Control and Prevention, for its support of the Rhode Island staff, and the printing and distribution of the monograph under cooperative agreement NU58DP007118 awarded to Rhode Island. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.



WHAT CAN A NURSE DO?

- Our RI and Southeastern MA ONS chapter went on a mission to help the nurse learn how to affect change and increase activity in Health Policy
- Informing legislators of current issues
- •Spearheading legislation to solve problems
- •Partnering for change



ONCOLOGY NURSING SOCIETY CAPITOL HILL DAY



COLLABORATING TOGETHER

- June 2021-Inaugural ONS RISE chapter event with Senator Reed
- July 2022- Genomic Testing Bill signed into law
- May 2024- WIH
 Nurse Practitioner
 Advocacy Event



The Nurse's Role in Health Policy

Heather Murphy MSN, FNP-BC, AOCNP

CO-COMMUNITY COLLABORATION



Co-Community collaboration for low-cost drug press conference



Breast Cryoablation Presentation -June 2022 ONS RI&SE Chapter, Women and Infants Hospital & US Senator Jack Reed

RHODE ISLAND AND SOUTHEASTERN MASS CHAPTER

GOAL

Increase chapter related health policy advocacy-

Partnership with US Senator Jack Reed

- Oncology Nurses can contribute beyond the bedside.
 Oncology Nurse excel in patient advocacy and must use that beyond clinical care and get involved in health policy matters
 Law makers need collaboration and need to be informed to make health policy decisions

IMPACT OF ADVOCACY BY OUR CHAPTER

- Assures coverage of genomic testing when ordered by provider Genetics protection Law: RI 28-6.7-

- Assuring standards for genetic counselors
 Working with Medicare to cover cyro-ablation procedure for breast
 cancer. LCD application pending



Gov. Dan Mckee signs Biomarker Testing Bill into law 7-2022



First ONS RI&SE Chapter Advocacy Night with U.S. Senator Jack Reed-June 2021

WHAT IS NEXT?

Breast Cryoablation

With support of Senator Reed's office

Collaboration with Dr. Robert Ward and WIH Breast Health Center surgeons

LCD application submitted

Will be heard for testimony November 7th

Elimination of Patient Cost Sharing for Breast

Diagnostic and Supplement Imaging

S.2070.H7737

Collaboration with PCRI and Susan Komen foundation.



HOW TO CONTRIBUTE



REACH OUT TO YOUR LEGISLATORS-LOCAL AND FEDERAL



JOIN ORGANIZATIONS LIKE THE PARTNERSHIP



TESTIFY EITHER IN PERSON OR BY WRITTEN TESTIMONY



A DECADE OF PROMISE FOR SURVIVORSHIP IN 2024 UNLOCKING THE CODE TO CANCER PREVENTION

Marcina (Marcie) Beaston, MS, CGC Cancer Genetics and Prevention Program Women & Infants Hospital of Rhode Island

To reach me: 401-430-7274 or MBeaston@wihri.org

Appointment/Referrals: 401-430-7250 (Fax 401-453-7785)







2024 RHODE ISLAND CANCER SUMMIT

A DECADE OF PROMISE FOR
SURVIVORSHIP IN 2024
UNLOCKING THE CODE
TO CANCER PREVENTION

Resources:

NCCN.org

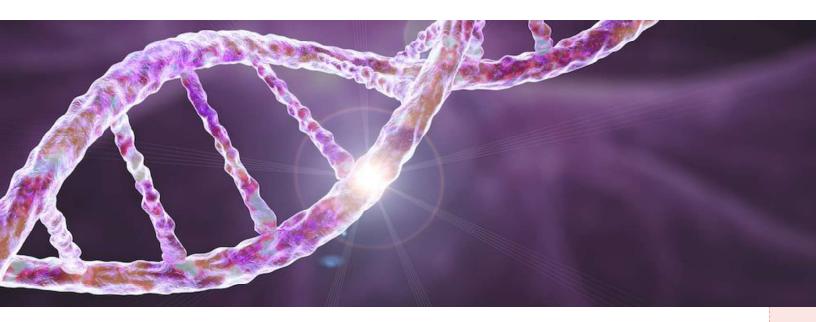
NCCN Guidelines: Detection, Prevention, and Risk Reduction

Genetic Information Nondiscrimination Act (GINA)

• Search "GINA and Genetics"

Yadav, Siddhartha et al. "Germline Genetic Testing for Hereditary Breast and Ovarian Cancer: Current Concepts in Risk Evaluation." *Cold Spring Harbor perspectives in medicine* vol. 14,8 a041318. 1 Aug. 2024, doi:10.1101/cshperspect.a041318





BRCA Care

Ellie Proussaloglou, MD

Assistant Professor of Surgery (Breast)

Division of Surgical Oncology, Department of Surgery

Physician Lead – High Risk Breast

Smilow Cancer Genetics and Prevention Program

High Risk Breast Genetic Variants

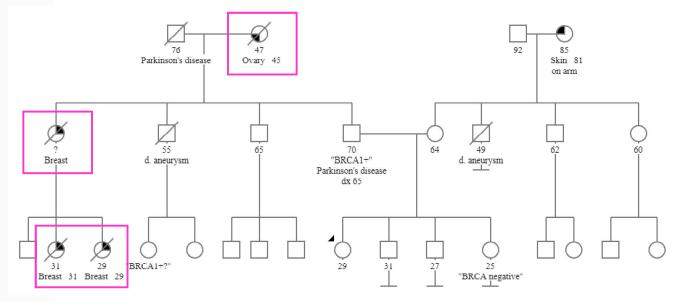
Cancer Susceptibility ^a	Moderate-Penetrance Genes	High-Penetrance Genes
Breast cancer	ATM, BRIP1, CHEK2, FANCD2, RAD51C	BRCA1, BRCA2, CDH1, PALB2, PTEN, STK11,
Ovarian cancer	ATM, BRIP1, EPCAM, MLH1, MSH2, MSH6, RAD51C	BRCA1, BRCA2
Endometrial cancer		EPCAM, MLH1, MSH2, MSH6, PMS2, PTEN

> 50% breast cancer lifetime risk



PDQ® Cancer Genetics Editorial Board. PDQ Genetics of Breast and Gynecologic Cancers. Bethesda, MD: National Cancer Institute.

Many families with BRCA have striking patterns of breast and ovarian cancer





What are associated breast cancer risks?

	BRCA1	BRCA2
Breast Cancer	40-87%	27-84%
Contralateral Breast Cancer	40%	20%
Male Breast Cancer	1%	8%



What are associated breast cancer risks?

BRCA1: earlier age of diagnosis, higher rates of triple negative breast cancer

BRCA2: more likely to have

Estrogen/Progesterone positive cancers

Male Dicast Cancer



Screening options

- × 18+ yo: Annual breast exam, breast self-awareness
- × 25-29 yo: annual screening MRI
- \times 30+ yo: annual MRI and mammogram
 - × Stagger screening every 6 months







Screening options: AMAB

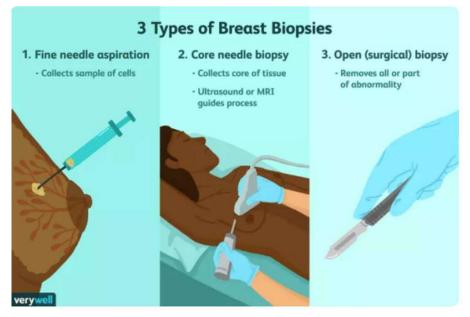


- × Mammograms beginning at 50 years old or 10 years prior to youngest male breast cancer (BRCA2 > BRCA1)
- × Annual chest wall exams



ASBrS Official Statement: Consensus Guideline on Diagnostic and Screening Magnetic Resonance Imaging of the Breast Practice Bulletin No 182: Hereditary Breast and Ovarian Cancer Syndrome. (2017). Obstetrics and gynecology, 130(3), e110–e126.

What if I have abnormal imaging?







Risk-reducing bilateral mastectomy

- × Removal of all breast tissue to decrease risk of breast cancer
- \times Lifetime risk decreases by > 90%
- No need for future imaging- screened by exam only
- × Disrupts function, sensation of breast
- × Psychosocial effects, consideration of breastfeeding, intimacy, body image







Jakub JW, Peled AW, Gray RJ, et al. Oncologic Safety of Prophylactic NSM in a Population With BRCA Mutations: A Multi-institutional Study. JAMA Surg. 2018;153(2):123–129. Li X, You R, Wang X, et al. Effectiveness of prophylactic surgeries in BRCA1 or BRCA2 mutation carriers: a meta-analysis and systematic review. Clin Cancer Res 2016;22:3971-3981 Honold F, Camus M. Prophylactic mastectomy versus surveillance for the prevention of breast cancer in women's BRCA carriers. Medwave 2018;18:e7161.



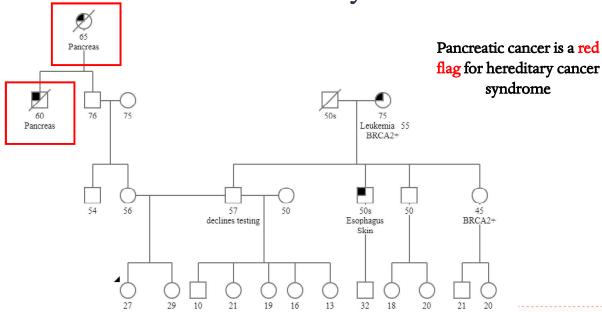
Reducing BRCA-Related Breast Cancer Risk



- 1. Be informed!
 - Breast self awareness
 - Know your risk- your physician should too!
- 2. Regular breast health screening
 - If you feel something new, shorter-interval screening
- 3. Healthy habits
 - Decrease alcohol consumption
 - Avoid tobacco
- 4. Consider risk-reducing medication
 - Tamoxifen esp. for BRCA2 carriers



BRCA families do not always have breast/ovarian cancer history





What are other associated cancer risks?

	BRCA1	BRCA2
Pancreatic Cancer	~5%	5-10%
Prostate Cancer	7-26% <i>More aggressive</i>	20-60% <i>More aggressive</i>
Ovarian Cancer	40-60%	15-30%
Other	? uterine papillary serous carcinoma	Melanoma



Management and Risk: Ovarian Cancer

- × Screening with US / (CA-125) no longer recommended less effective
- × Removing tubes/ovaries is best risk reduction technique
 - × +- hysterectomy



Management and Risk: Ovarian Cancer

- $\times\,$ Screening with US / (CA-125) no longer recommended less effective
- × Removing tubes/ovaries is best risk reduction technique
 - × +- hysterectomy



- BRCA1+ pts with Breast Cancer have <u>12.7%</u> of developing subsequent ovarian cancer
- × rrBSO: 35-40



- × **10-27%** risk by age 70
- BRCA2+ pts with Breast Cancer have <u>6.8%</u> of developing subsequent ovarian cancer
- × rrBSO: 40-45



Other screening recommendations



Annual Dermatology Exam



Abdominal MRI +/-Endoscopic US



Rectal Exam & PSA Lab testing



Thank You!

Ellie Proussaloglou. MD







