

Addressing New Jersey's Cancer Burden through Partnership and Collaboration: New Jersey State Cancer Registry and Rutgers Cancer Institute

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AACI Catchment Area Research Data Science (CARDS)

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Cancer Incidence and Mortality

6th highest cancer incidence in US*

Invasive Incidence Rate

- **NJ:** 497.1 (2023) **US:** 455.0 (2023)
- **NJ:** 484.4 (2017)

60,740 estimated cancer cases in 2026

48th in cancer mortality in US

Mortality Rate

- **NJ:** 121.5 (2024) **US:** 139.2 (2024)
- **NJ:** 143.6 (2017)

15,150 estimated cancer deaths in 2026

*Most up-to date US rates available

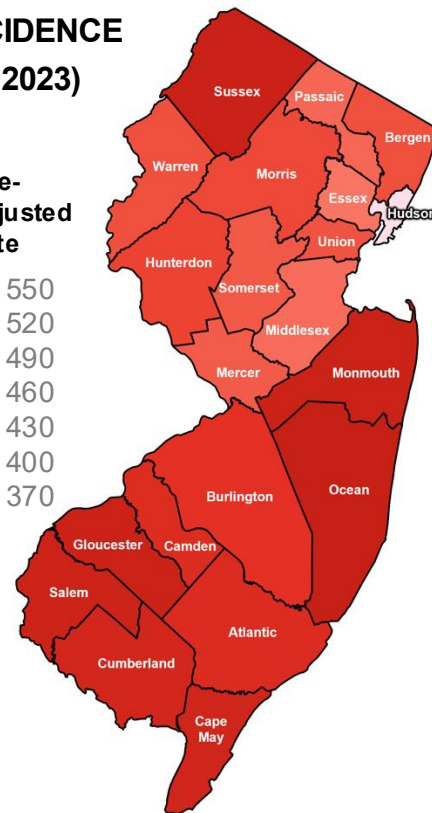
Age-Adjusted Cancer Rates in New Jersey

(Per 100k, all cancer sites combined)

INCIDENCE (2023)

Age-
Adjusted
Rate

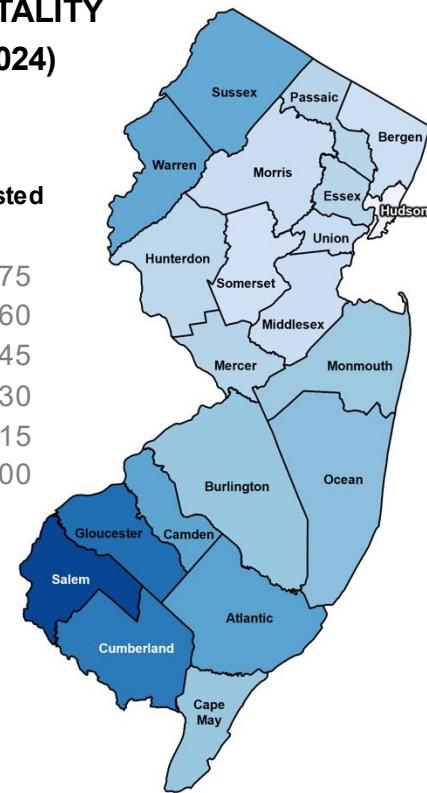
550
520
490
460
430
400
370



MORTALITY (2024)

Age-
Adjusted
Rate

175
160
145
130
115
100



The State of New Jersey

9.5 million people within 1,292 sq. mi.

1st

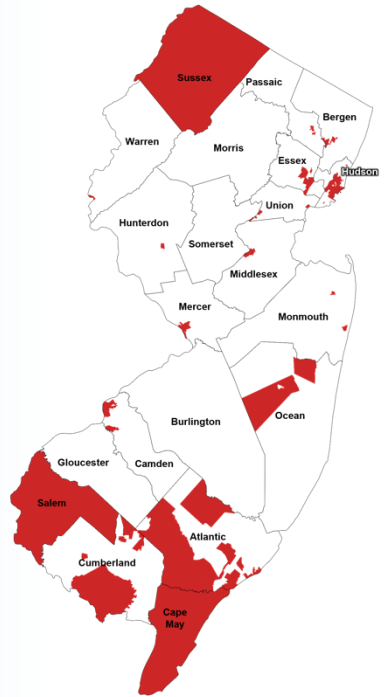
in population density – 9.5 M people within 1,292 mi²

6th

most ethnically diverse state

	New Jersey	US
Below Poverty Level	9.2%	10.6%
Population Density	1,292 m ²	96 m ²
Urban Population	93.7%	80.7%
Rural Population	6.3%	19.3%
College+	43.6%	35.7%
Literacy Level	83.1%	79.0%
Age 65+	18.5%	18.9%
Foreign Born	23.9%	14.1%
LGBTQ+	5.2%	9.3%
White	66.8%	72.3%
Black	15.8%	13.5%
Asian	11.7%	7.2%
Hispanic/Latino	24.0%	20.5%
American Indian/ Alaskan Native	1.8%	2.1%

Medically Underserved Areas of New Jersey (HRSA)



□ HRSA-designated medically underserved areas



Up-to-date Sources: US Census QuickFacts V2024; USDA RUCA (Urban/Rural), Gallup (LGBTQ), National Center for Education Statistics (Literacy)

New Jersey State Cancer Registry

- State of New Jersey, New Jersey Department of Health
- NCI SEER Program (#75N91021D00009)
- CDC NPCR (#5NU58DP007117)
- Rutgers Cancer Institute



NJSCR Staff Meeting, MCCC park, 9/11/25

New Jersey State Cancer Registry

- Statewide population-based cancer registry, collecting data on all cancer cases diagnosed and/or treated since October 1, 1978.
- State law requires all cancers and some benign conditions (e.g., benign brain tumors) diagnosed in New Jersey to be reported to the Department *vis-à-vis* the NJSCR.
- All healthcare providers—including hospitals, physicians, dentists, laboratories, and ambulatory care centers—must report to the NJSCR.
- By delivering high-quality data, NJSCR supports critical population-based research, education, and cancer control initiatives while monitoring cancer incidence in New Jersey.
- In 2009, NJDOH established a Memorandum of Agreement (MOA) with Rutgers Cancer Institute to manage the registry with delegated authority.



N.J.S.A.
26:2-104 - 109



N.J.A.C.
8:57A



Cancer Surveillance Research Program

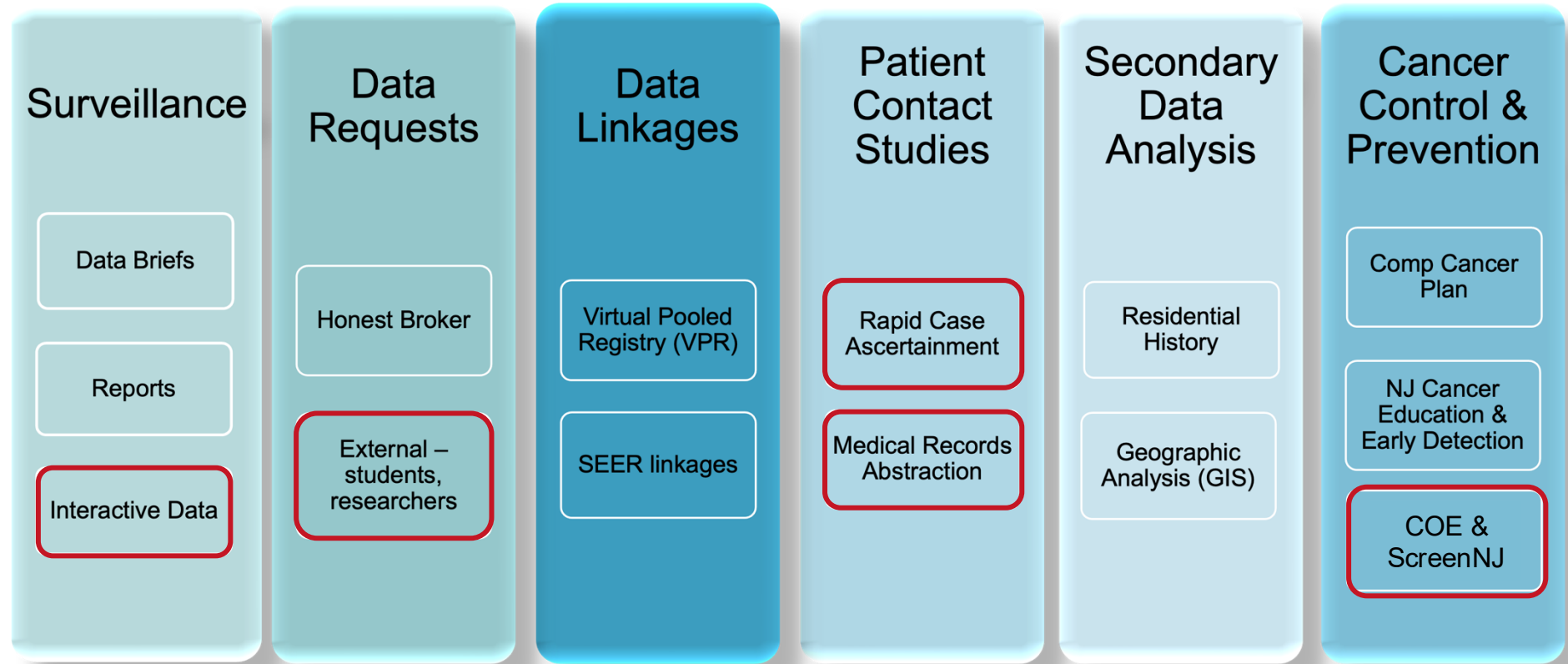
□ N.J.A.C. 8:57A - Purpose:

1. Monitor cancer incidence and mortality trends in New Jersey.
2. Conduct epidemiologic surveys of cancer and cancer-related diseases.
3. Assist physicians, researchers,..., to understand cancer, improve cancer treatment, increase survival, improve long-term quality of life for cancer patients and identify the most appropriate cancer prevention and control measures.

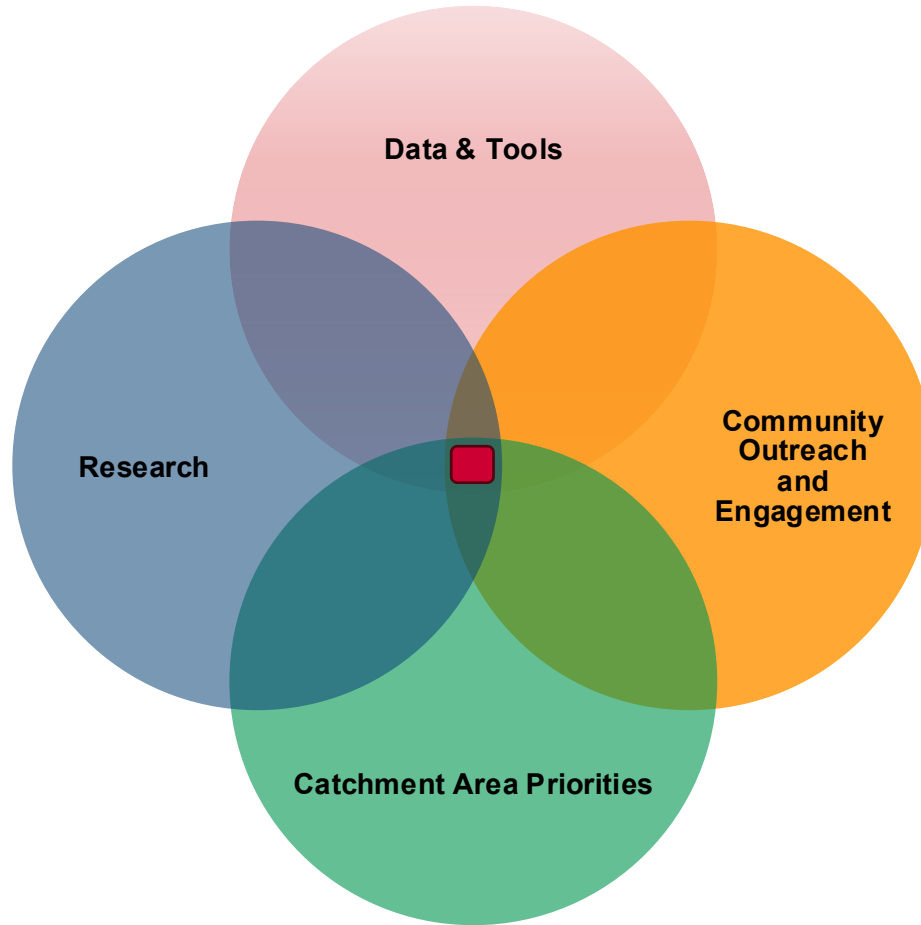


Lisa Paddock, PhD, MPH
Deputy Director

Expansive Cancer Surveillance and Research Services



Intersection of Surveillance – Research – Catchment Area Priorities – Community Outreach & Engagement



☐ Data & Tools

☐ Interactive web-based data

☐ Mapping Tools & Dashboards



STRIDE Dashboard

Developer: Daniel Pearson

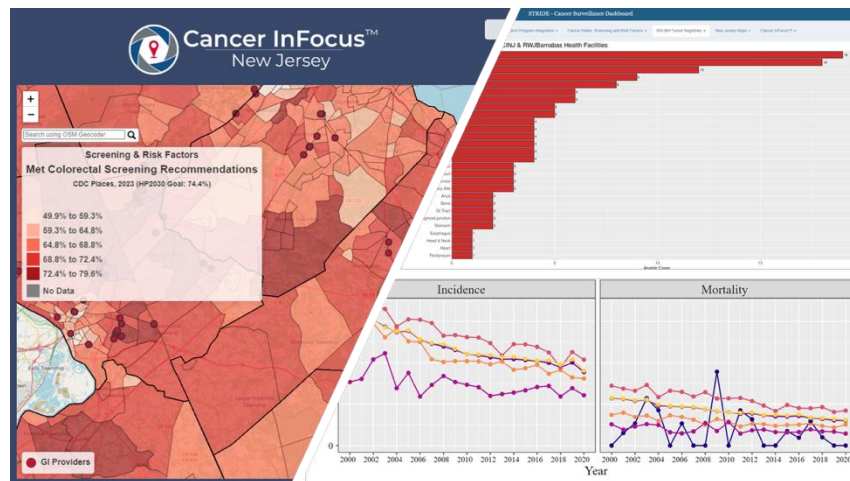


Surveillance, **T**racking, and **R**eporting through
Informed **D**ata Collection and **E**ngagement

- **External:** Informed by statewide cancer surveillance data from NJSCR and SEER for incidence, mortality, and stage
- **Internal:** Hospital-based cancer registries and clinical trials system provide data for research programs
- **Cancer InFocus™:** public data gathering, visualization and mapping suite for complete catchment area exploration



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STRIDE Dashboard Usage by Year

	2022	2023	2024	2025	2026
Cancer Center Users	18	38	60	65	67
Total Visits	56	394	2203	3145	2198

<https://published.cinj.rutgers.edu/stride/>
<https://published.cinj.rutgers.edu/cif/>



New Jersey Cancer Atlas: Cancer Zones

- Dynamic tool for New Jersey cancer incidence and population demographics
- NJSCR/CSRP, NCI/SEER, Westat, CHECoE
- Origins: AZ Tool (<https://aztool.geodata.soton.ac.uk/>)
- Adapted by NCI*

<https://njzonemap.njscr.org/>



New Jersey Cancer Atlas is an interactive mapping tool of cancer data for 150 cancer reporting zones in New Jersey. You can map cancer incidence for the 23 most common invasive cancer sites and for all sites combined and filter by sex and race/ethnicity. [Visit Learn](#) to review methodology, data sources, and more.

Cancer Incidence ⓘ

Area Type

Zone

Location Search ⓘ

40.47593163423407,-74.428957673407

Time Period

5-Year: 2018-2022

Cancer Site/Type

All Cancer Sites

Sex ⓘ

Male and Female

Race/Ethnicity ⓘ

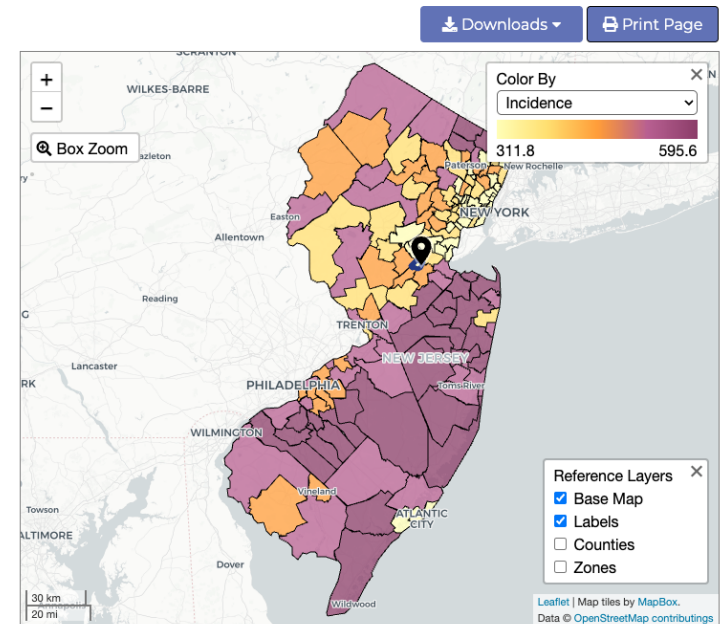
All Races/Ethnicities

Location Details

Zone: New Brunswick City (A9055za)

Counties: Middlesex County

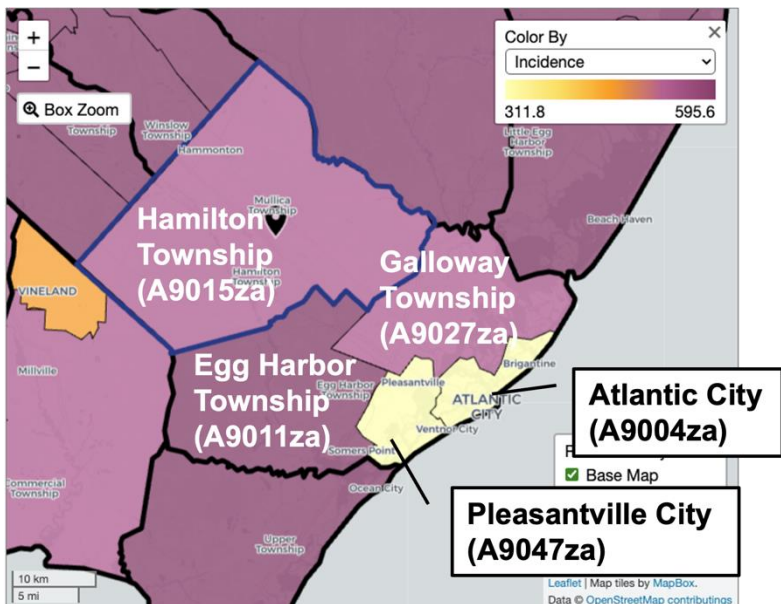
Places: Highland Park, New Brunswick



New Jersey Cancer Atlas: Cancer Zones

- Minimum defined area: Census Tract (2010 Census)
- Must be contiguous (share a border)
 - Zones don't cross county boundaries
 - 2 counties are whole zones (Cape May, Salem)
 - Large townships/municipalities split into different zones (e.g., Newark)
- Minimum population of 50,000 (2010 Census)
- Rates are suppressed if case count is < 15 (unstable)
- Similar on 3 demographic and socioeconomic characteristics:
 - % Minority (aka: Not Non-Hispanic White)
 - % Living in areas designated as rural
 - % Below poverty
 - Census American Community Survey 2012-2016 5-year data

New Jersey Cancer Atlas: Atlantic County Cancer Zones



- Characteristics of zone markedly different
- Hamilton Township most rural
- Galloway Township less rural but high minority population
- Pleasantville urban, high minority population, slightly higher poverty
- Atlantic City urban, highest minority population and poverty

Zone Name (#)	Total Population	% Rural	% Minority	% Below Poverty
Hamilton Township (A9015za)	56,126	41.1%	27.6%	8.3%
Galloway Township (A9027za)	53,946	5.1%	38.6%	8.3%
Egg Harbor Township (A9011za)	56,126	15.8%	30.6%	9.3%
Pleasantville City (A9047za)	54,094	< 1%	43.1%	10.9%
Atlantic City (A9004za)	54,257	< 1%	68.0%	27.2%

New Jersey Cancer Atlas: Atlantic County Cancer Zones

Statewide: 465.5 (463.7, 467.3)
Atlantic County: 473.8 (463.6, 484.2)

- 2018-2022 County rate not statistically different than Statewide rate but there are 3 zones within Atlantic County that are.

Zone Name (#)	Zone Age-Adjusted Incidence Rate (95% CI)
Hamilton Township (A9015za)	500.5 (477.3, 524.6)
Galloway Township (A9027za)	488.7 (464.9, 513.5)
Egg Harbor Township (A9011za)	566.4 (540.7, 593.2)*^
Pleasantville City (A9047za)	421.9 (401.1, 443.7)*^
Atlantic City (A9004za)	413.5 (392.4, 435.5)*^

Significantly **higher/lower than **State** Rate

^^ Significantly **higher/lower** than **County** Rate

Intersection of Surveillance – Research

□ Research

- Cancer Disparities, Cancer Health Equity
- Social Determinants
- Risk Factors, Screening, Early Detection
- Treatment, Outcomes
- Prostate, Cervical, Breast, Colorectal, Ovarian
- Multiethnic cohorts, African-Americans, Southeast Asians



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Intersection of Surveillance – Catchment Area Priorities

- Evaluation 2024
- Expansion January 1, 2025



Intersection of Surveillance – Catchment Area Priorities

Rutgers Cancer Institute Priorities

Effective January 1, 2025

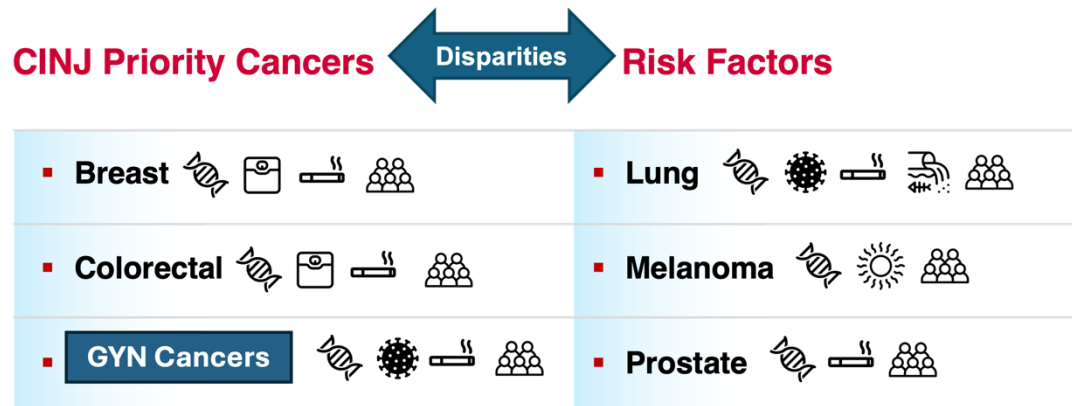


▪ Breast    	▪ Lung     
▪ Colorectal    	▪ Melanoma   
▪ GYN Cancers    	▪ Prostate   

Risk Factors (and Icon Key):

- Obesity/Metabolic Dysregulation 
- Infectious Agents 
- Tobacco Use 
- Environmental Exposures 
- Hereditary Cancers 
- Social Drivers of Health 

Intersection of Surveillance – COE



Risk Factors (and Icon Key):

- | | |
|--|---|
| ▪ Obesity/Metabolic Dysregulation  | ▪ Environmental Exposures  |
| ▪ Infectious Agents  | ▪ Hereditary Cancers  |
| ▪ Tobacco Use  | ▪ Social Drivers of Health  |

1. Expanded HPV infection to include all Infectious Agents linked to cancer
2. Replaced HPV-related cancers with Gynecologic Cancers

ScreenNJ targets a large scope of cancers, risk factors, health assessments, and access barriers:

- ☐ Priority cancers
- ☐ Tobacco cessation and smoking
- ☐ Genetic risk assessment
- ☐ HPV vaccination
- ☐ Transportation, food, insurance, language, etc.

ScreenNJ incorporated new priorities July 1, 2025

Intersection of Surveillance – COE

Turning surveillance data into actionable outreach

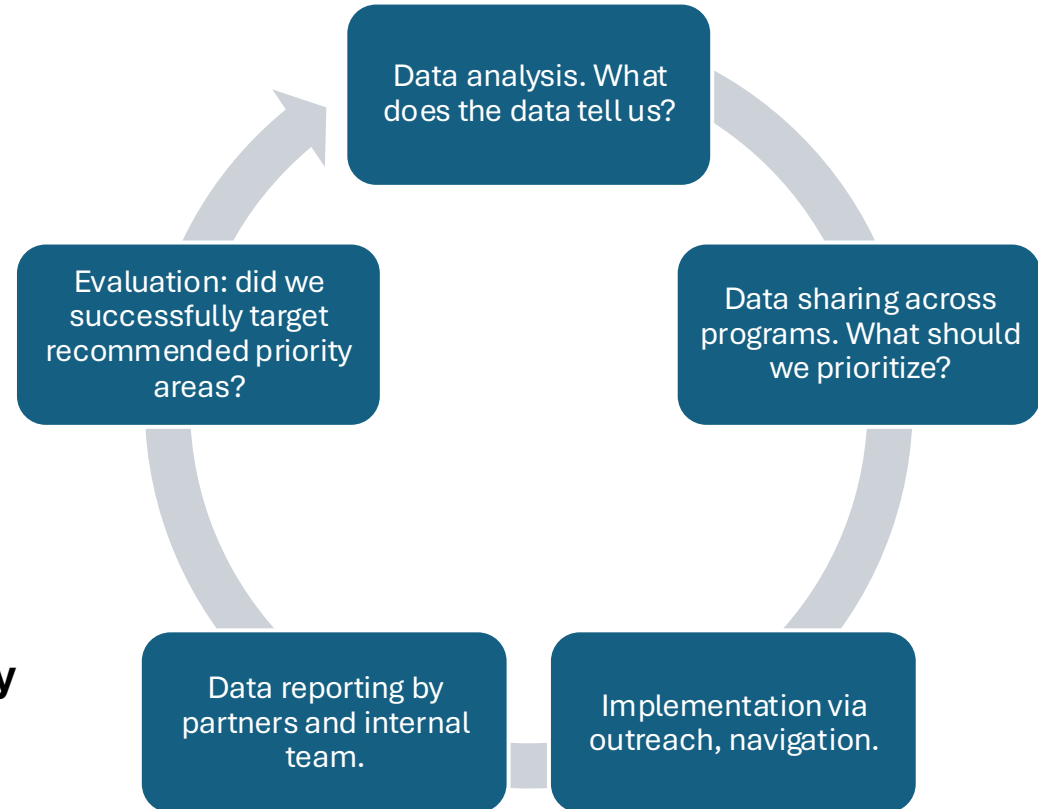


Screening, risk reduction, and access to timely care are the most effective ways to reduce the cancer burden. Our goal is to ensure that we reach the populations most in need of these services.

- Maximize the impact of data-driven ScreenNJ programming and screening efforts.
- Find the intersection between NJ data and ScreenNJ program data.

Surveillance-Led Engagement (SLE) Strategy

- Surveillance data feeds into program implementation
- ScreenNJ data will feed back into surveillance data.



Surveillance-Led Engagement (SLE)



- Present data at monthly ScreenNJ leadership meetings
- Update surveillance statistics as they become available (staying ahead of trends, etc.)
- STRIDE and Cancer InFocus:
 - Cancer Zone Mapping link (subcounty rates)
 - Asian & Hispanic origin and enclave data
- Meetings with other program leads and outreach team staff; supplying visuals and guidance, including event and partner site geocoding
- **Created 4 data-driven recommendations**
- Expanded partner data collection to include event locations and race & ethnicity of screened patients

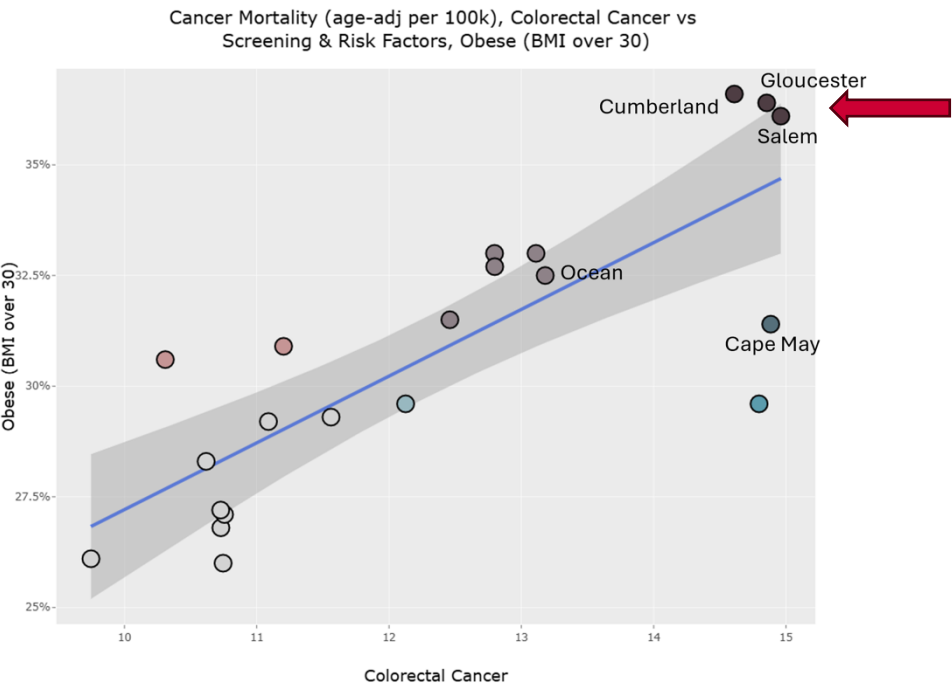
Four Data-Driven Recommendations



(1) Target cancer screening efforts in the **youngest screening eligible population groups**

(2) Address **modifiable risk factors** leading to poor cancer outcomes in **South Jersey counties**

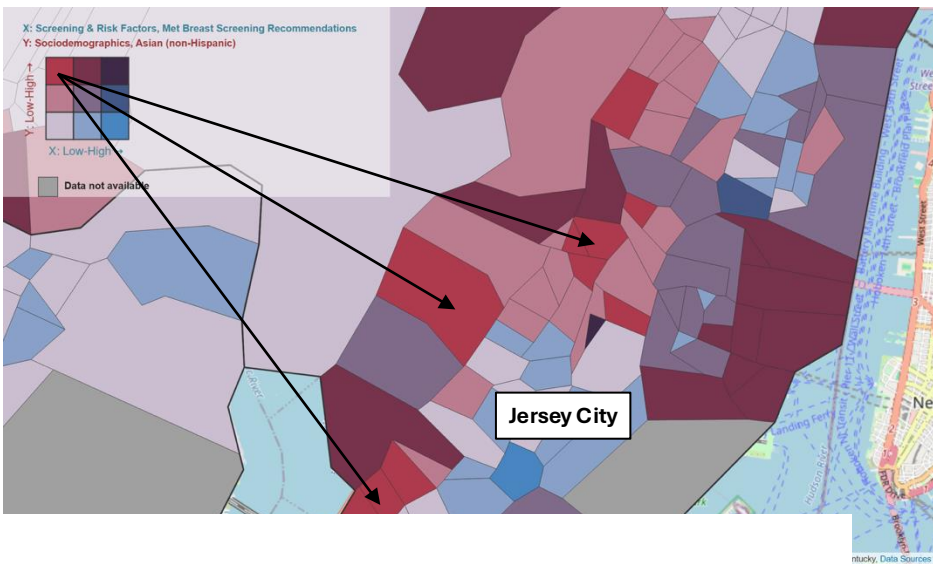
Colorectal Cancer Screening Rates by Age Group New Jersey (2022 to 2024 – CDC BRFSS)			
Age	2022	2024	Change
45-54	43.3%	53.6%	+10.3%
55-64	72.6%	77.1%	+4.5%
65-75	79.5%	86.5%	+7.0%
Overall	65.4%	72.3%	+6.9%



Four Data-Driven Recommendations



(3) Target preventative screening efforts in areas with **high Asian populations & low screening rates**

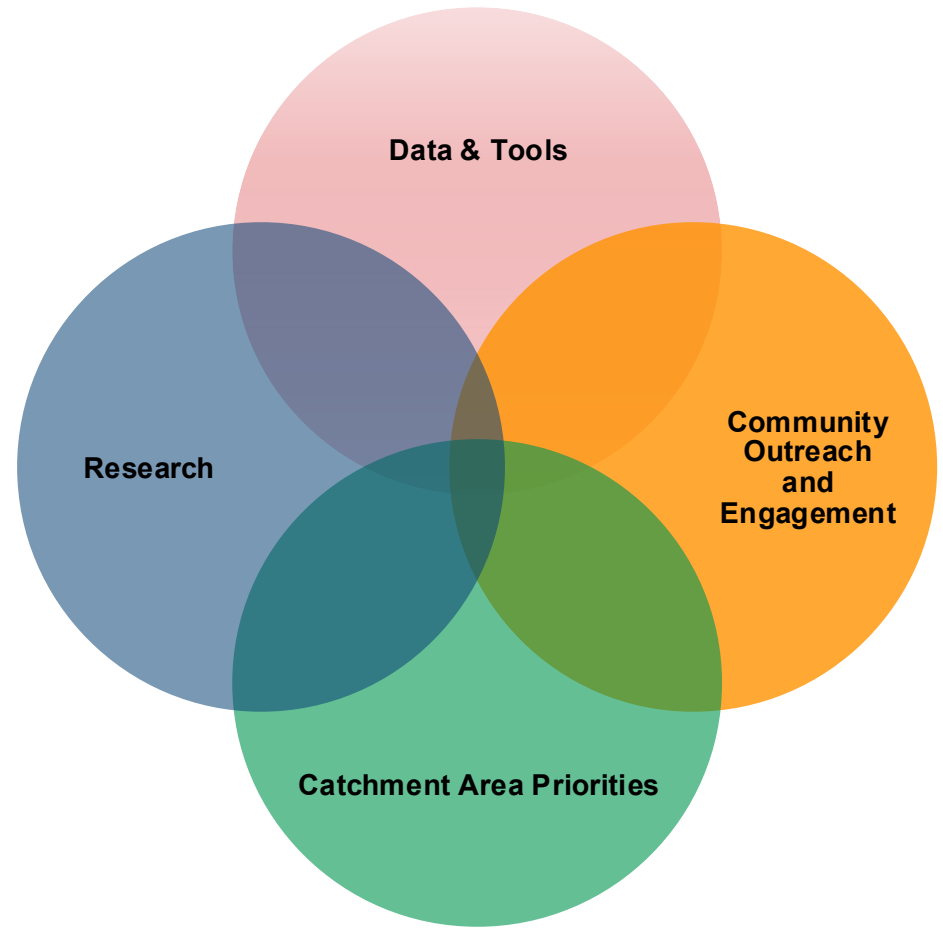


(4) Expand **gynecologic cancer outreach and awareness** across New Jersey

NEW JERSEY AGE-ADJUSTED INCIDENCE RATES				
CANCER SITE (NATIONAL RANK)	RATE		NJ V. US	HP2030
Prostate (2nd)	147.4		22.2%	118.1
Female Breast (9th)	143.0		6.4%	122.0
Lung and Bronchus (36th)	46.4		-5.8%	49.8
Colon and Rectum (9th)	39.5		8.9%	46.7
Uterus (7th)	31.4		9.9%	NA
Melanomas of the Skin (31st)	21.4		-7.5%	20.0
Ovary (7th)	10.9		9.2%	NA
Cervix (20th)	7.5		1.3%	7.2

Conclusion

- State cancer registries play a critical role in addressing the cancer burden
- Provide important insights for program planning through data, tools, and research services
- Critical to setting catchment area priorities and identifying specific populations in the catchment area for outreach and education



Thank you. Q&A.



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