



SEER Cancer Registries: A Research Resource

New Grantee Workshop

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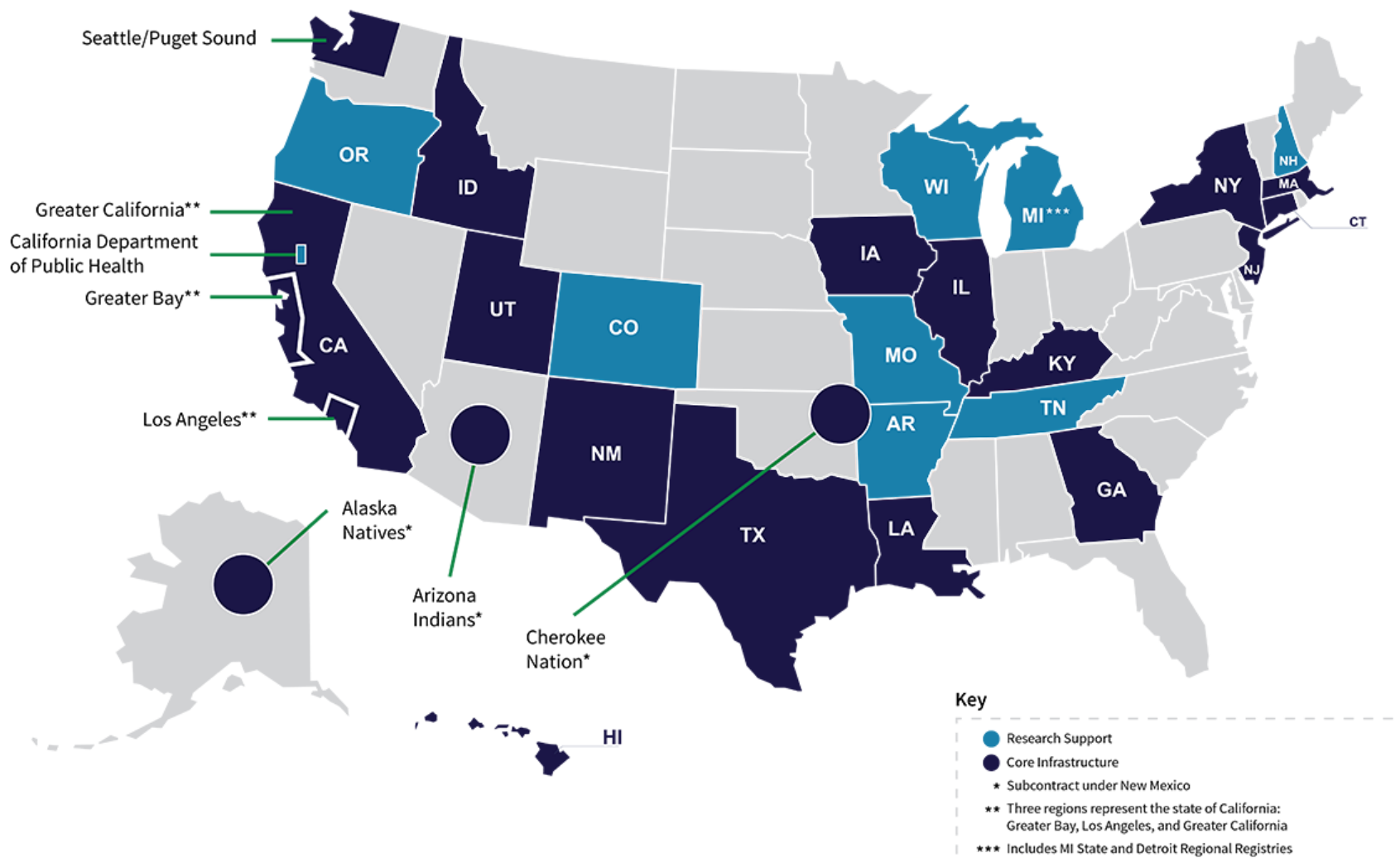
Surveillance Research Program, DCCPS

SEER Registries

Population-based registries representing almost 50% of the U.S. population:

- **Demographic:** age, gender, area of residence, race and ethnicity, insurance status, marital status.
- **Tumor (cancer):** primary cancer site, histology, morphology, stage, lab values and tumor markers
- **Treatment:** first course of treatment - chemotherapy, surgery, radiation
- **Outcome** (follow-up for vital status): living or deceased, month and year of death and cause of death
- SEER data is linked at the county level with Census data and provide socio-economic variables at the county of residency
- **Data is consolidated and available for analyses**

SEER Registries



Standard Statistics Reported Using SEER Data

- Incidence: Age-adjusted rate per 100,000
- Trends in incidence, annual percent change in rates, or average annual percent change over a specified time frame
- Prevalence of people alive with a previous diagnosis of cancer
- Cancer Survival Statistics (Relative or Cause Specific Survival)
- Probability of developing or dying of cancer over a lifetime

Where Are SEER Statistics Reported?

<https://seer.cancer.gov/>

- Did You Know Videos – highlight key topics and trends in cancer statistics (<https://seer.cancer.gov/statistics/videos/>)
- Fact Sheets – Plain language summaries of key statistics by cancer site (<http://seer.cancer.gov/statfacts/>)
- SEER*Explorer - Interactive website that provides easy access to a wide range of SEER cancer statistics (<https://seer.cancer.gov/explorer/>)
- State Cancer Profiles (County level information and Interactive Maps) (<http://statecancerprofiles.cancer.gov/>)
- Annual Report to the Nation - provides an annual update of cancer incidence, mortality, and trends in the United States. ([Annual Report to the Nation on the Status of Cancer](#))

Choose Cancer Site ?
Statistic Type
View the Help Guide

All Cancer Sites Combined
SEER Incidence

Recent Trends
Recent Rates
Long-Term Trends
Rates by Age

Characteristics to Compare Legend

Sex

Race/Ethnicity

Age

Rate Type

Sex Legend

Both Sexes

Female

Male

Race/Ethnicity Pages

All Races (includes Hispanic)

American Indian / Alaska Native (includes Hispanic)

Asian / Pacific Islander (includes Hispanic)

Black (includes Hispanic)

Hispanic (any race)

Non-Hispanic White

White (includes Hispanic)

Age Pages

All Ages

Ages < 50

Ages 50-64

Ages 65+

Ages <15

Ages 15-39

Ages 40-64

Ages 65-74

Ages 75+

Ages < 20

Rate Type Pages

Observed Rates

Delay-adjusted Rates

More Options

Precision:

Show Confidence Interval

Table Display:

Trends

Rates

All Cancer Sites Combined

Recent Trends in SEER Incidence Rates, 2000-2016

By Sex

All Races (includes Hispanic), All Ages, Observed Rates

Previous
Page 1 of 1
Next

Legend (Sex)

▲ Female

▼ Male

More SEER Resources

Sex	Annual Percent Change				
	Year Range	Estimate (%)	P-Value	Direction	
Female	2000-2016		-0.1	0.0	↓
Male	2000-2008		-0.6	0.0	↓
	2008-2016		-2.3	0.0	↓

Data Source
Methodology
Race/Ethnicity Coding
Cancer Site Coding

Data Source

SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

How Do I Get Access To The Data?

- <https://seer.cancer.gov/seerstat/>
- Software provides access to SEER database, US mortality files from NCHS, and population data from the Census
- About 10,000 researchers get access to SEER data each year through SEER*STAT
- Analyses can run from simple to complex

Tutorials

NCI Analytic Tools SEERies



SEER

OCTOBER 14TH FROM 1PM-3PM (ET)
*SEER & SEER*STAT OVERVIEW*

OCTOBER 28TH FROM 1PM-3PM (ET)
SURVIVAL

NOVEMBER 2ND FROM 1PM-3PM (ET)
SEER VARIABLES

NOVEMBER 4TH FROM 1PM-3PM (ET)
DELAY AND JOINPOINT

Statistical Software & Tools

Tools that use SEER*STAT output

<https://surveillance.cancer.gov/tools/>

- Joinpoint – Trend Analysis
- Devcan – Risk of Diagnosis and Death
- HD*Calc – Health Disparities Calculator
- CanSurv – Survival Models including Cure Models
- ComPrev and ProjPrev – Complete and Projected Prevalence

Software has on-line descriptions and tutorials

SEER Research Resources and Linked Data Sets

Healthcare Delivery Research Program

SEER-Medicare: Linkage of SEER data and Medicare enrollment and claims data (<https://healthcaresdelivery.cancer.gov/seermedicare/>)

SEER – Medicare Health Outcomes Survey (SEER-MHOS): Rich data source on cancer patient-reported health outcomes from Medicare Advantage (HMO) beneficiaries (<https://healthcaresdelivery.cancer.gov/seer-mhos>)

SEER – Consumer Assessment of Healthcare Providers and Systems (SEER-CAHPS): Rich data source on experiences of care from cancer patient perspective (<https://healthcaresdelivery.cancer.gov/seer-cahps>)