

2019 NPCR IDAHO SUCCESS STORY

Idaho Cancer Registry: Johnson CJ, Morawski BM, Cariou C, Rycroft R

Idaho's County Cancer Profiles: Impact at the Local Level

NATIONAL PROGRAM OF CANCER REGISTRIES SUCCESS STORY

SUMMARY: As in politics, all public health is local.¹ This guiding principle of responsiveness to local communities drives the Cancer Data Registry of Idaho (CDRI)'s annual publication of county-specific cancer profiles, which are used in needs assessment, program planning, and evaluation. In addition to providing published reports, CDRI staff presents County Cancer Profile summaries to local health departments and their respective cancer coalitions. In turn, these local actors have used the county-level data to focus programmatic activity.

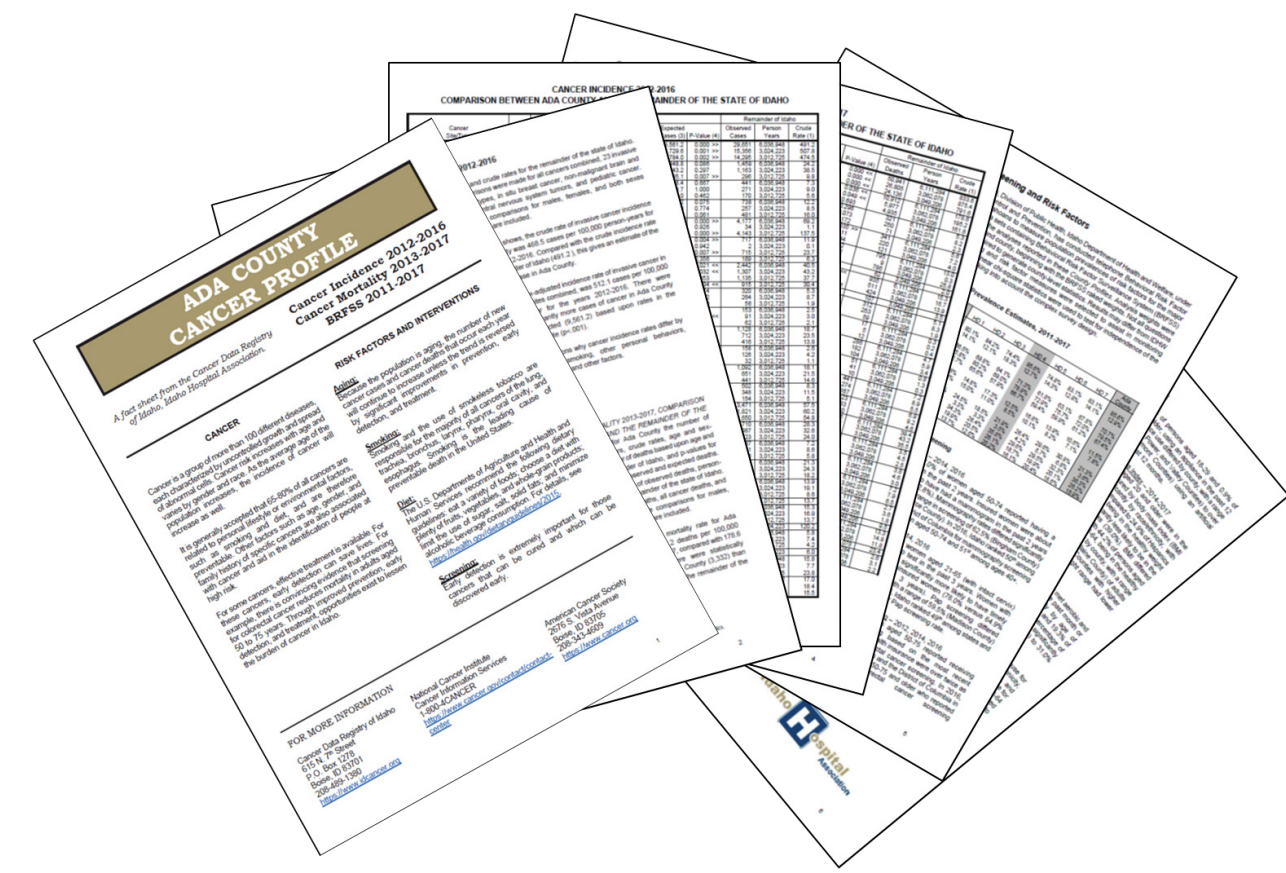
CHALLENGE: It is incumbent on central cancer registries to provide robust cancer statistics at an actionable local level while protecting privacy. Central cancer registries may struggle to provide community-level cancer burden statistics (i.e. incidence, mortality, survival, prevalence, risk factors, and screening behaviors) that are at a sufficiently granular geographic level to inform action and yet are statistically stable and still safeguard privacy. The United States Cancer Statistics Data Visualizations website contains county-level cancer incidence and mortality data for the most recent five-year period.² County-level statistics are often appropriate for Idaho, as county is typically the lowest geographic level for public health planning. In many areas of the U.S. and in several areas in Idaho, county is too coarse a geography for focusing public health interventions. Some central cancer registries have been tasked by state governments to provide cancer incidence data at the census tract or other fine level of geography.^{3,4,5}

SOLUTION: One of Idaho's solutions to the local-level statistics challenge is the publication of County Cancer Profiles, 6-page PDF documents that are accessible on the CDRI website via a clickable map, and include the latest 5 years of cancer incidence, mortality, and aggregated Behavioral Risk Factor Surveillance System (BRFSS) data at the county level.⁶ These profiles — a collaborative effort among CDRI, Idaho's other CDC-funded cancer programs, the Comprehensive Cancer Alliance for Idaho, and other Idaho chronic disease programs — are one way in which CDRI encourages use of cancer registry data for public health and surveillance research purposes. They support CDRI's work plan objective to annually "publish a set of county-specific cancer profiles for use in needs assessment, program planning, and evaluation," and align with CDC's call to NPCR registries to increase collaboration with other cancer and non-cancer chronic disease programs at state and local levels.

Idaho is the 14th largest and 12th least populous U.S. state, composed of 44 counties ranging in population from 873 to 456,849. The primary outlets for delivering public health services in Idaho are the independent public health districts,⁷ with each district serving 4–8 counties in its jurisdiction. Each district has a board of health appointed by county commissioners within that region. Although districts are not part of any state agency, they work closely with the Idaho Department of Health and Welfare and other state and local agencies. Each district provides services that target local needs and vary from district to district. Many services, including some cancer prevention and control activities, are provided through contracts with the Idaho Department of Health and Welfare. CDRI routinely publishes reports with public health district- and county-specific information to aid health districts in focusing public health programmatic activities.^{8,9}

RESULTS: CDRI has published an annual series of County Cancer Profiles since 2005. The target audience for the County Cancer Profiles includes health professionals and public health professionals at the state and local level. The profiles include textual descriptions of major cancer drivers and population-attributable fractions, and tables with numbers of observed cases and deaths, person-years, crude rates, age and sex-adjusted rates, expected numbers of cases and deaths based on age and sex-specific rates in the remainder of Idaho, and p-values for statistical tests comparing the numbers of observed and expected cases and deaths. The Bureau of Vital Records and Health Statistics (BVRHS), Division of Public Health, Idaho Department of Health and Welfare, provides data sets containing BRFSS data to CDRI staff, who perform the statistical analyses reported in the County Cancer Profiles. To assist in monitoring cancer plan objectives, the Comprehensive Cancer Alliance for Idaho selected cancer screening and risk factor measures which include:

- health insurance coverage
- not seeing a doctor due to cost in the past year
- compliance with mammography, pap test, and colorectal cancer screening
- tobacco use
- sunburn and artificial tanning appliance use
- body mass index
- physical activity
- home radon testing.



In 2017, CDRI's epidemiology staff began traveling to some of Idaho's public health districts to meet with their local cancer coalitions and provide summaries of the cancer profiles for the counties in their jurisdiction. During these presentations, CDRI staff make the County Cancer Profiles more accessible to the target audience by highlighting important results and potential drivers of trends for individual counties, and explaining how the cancer incidence, mortality, risk factor, and screening data typically paint a cohesive picture of cancer burden. The public health districts find that the combination of the published County Cancer Profiles and discussion during in-person presentations is valuable to stakeholders, who use local-level data to guide decision-making. For example:

- Central District Health Department (CDHD) focused tobacco cessation efforts in one county because it has one of the highest rates of smoking in the state. CDHD is working with city parks in the county to implement smoke-free policies.
- CDHD identified another county in its jurisdiction with high skin cancer incidence and is working to educate park staff on sun safety and provided them with sunscreen dispensers.
- In response to information on colorectal cancer burden and screening data published in Cancer County Profiles, South Central Public Health surveyed providers regarding colorectal cancer screening protocols, collected information about motivators and barriers for colorectal cancer screening at health fairs, and their "Physician Champion" focused contacts with providers in two counties with high need.

SUSTAINING SUCCESS: Because the County Cancer Profiles are frequently used by state and local public health professionals, CDRI aims to continue to produce the series annually and provide in-person presentations of the results for public health practitioners. Counties and health districts could also benefit from sub-county cancer burden estimates for their own planning, so CDRI is working on methods for providing cancer statistics that are more granular than county but still statistically robust and protective of privacy. For example, CDRI is one of 23 U.S. central cancer registries collaborating with the Cancer Surveillance Branch and the National Environmental Public Health Tracking Program on a pilot study to determine appropriate levels of spatiotemporal aggregation for sub-county cancer incidence data.

CONTACT INFORMATION:

Tel: 208-489-1380
<https://www.idcancer.org/>

¹ O'Neill, T., & Hymel, G. (1994). All politics is local, and other rules of the game. New York: Times Books.

² U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on November 2018 submission data (1999-2016): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; www.cdc.gov/cancer/dataviz, June 2019.

³ State of New York, 2013. New York public health law 2401-B. Cancer incidence and environmental facility maps. Available from: http://www.lawserver.com/law/state/new-york/ny-laws/ny_public_health_law_2401-b.

⁴ Boscoe, F. P., Talbot, T. O., & Kulldorff, M. (2016). Public domain small-area cancer incidence data for New York State, 2005-2009. *Geospatial health*, 11(1), 304. doi:10.4081/gh.2016.304

⁵ Maniscalco L, Zhang L, Yi Y, Lefante C, Rosales C, Hsieh MC, Wu XC (eds). *Cancer Incidence in Louisiana by Census Tract, 2005-2015*. New Orleans: Louisiana Tumor Registry, 2019.

⁶ <https://www.idcancer.org/ContentFiles/special/CountyProfiles/CountyMap.htm>

⁷ <https://healthandwelfare.idaho.gov/Health/HealthDistricts/tabid/97/Default.aspx>

⁸ <https://www.idcancer.org/ContentFiles/AnnualReports/Cancer%20in%20Idaho%202016.pdf>

⁹ Johnson CJ, Morawski BM, Rycroft R. Incidence of Cancers Associated with Modifiable Risk Factors and Late Stage Diagnoses for Cancers Amenable to Screening, Idaho 2013-2016. Boise, ID: Cancer Data Registry of Idaho; September 2019.



**Centers for Disease
Control and Prevention**
National Center for Chronic
Disease Prevention and
Health Promotion