

2022 NPCR ARKANSAS SUCCESS STORY

Arkansas Central Cancer Registry; Lindsay M. Collins, MPA, and Daniela Ramirez Aguilar, MPH

Dissemination of Registry's Cervical Cancer Data at the Arkansas Cervical Cancer Task Force

National Program of Cancer Registries SUCCESS STORY

SUMMARY

As enacted by Arkansas state law, Arkansas Central Cancer Registry (ACCR) is required to provide an annual data update to the Arkansas Cervical Cancer Task Force to use data-based evidence in providing recommendations to the BreastCare Advisory Board concerning standards and policy relating to public awareness, screening, prevention, and treatment of cervical cancer. Despite internal registry changes, ACCR was able to provide a timely update in April 2022 and gained insight for data points of interest to the task force.

CHALLENGE

Although the number of cervical cancer cases and deaths have significantly decreased in the United States (US) largely due to Papanicolaou (Pap)/Human Papillomavirus (HPV) screening tests, cervical cancer continues to geographically impact low-income, at-risk females¹⁻³. In 2014-2018, Arkansas had the 3rd highest incidence rate of 15 cervical cancer cases per 100,000 population⁴ and 3rd highest mortality rate of 3.1 cervical cancer deaths per 100,000 population in 2019⁵. For a treatable disease when detected early through Pap/HPV screening tests and is largely preventable with the HPV vaccine, Arkansas needs to continue coordinating statewide efforts to combat cervical cancer health disparities by targeting areas in need of cervical cancer preventative services.

Additionally, a major operational challenge for the ACCR were staff changes including the departure of its cancer epidemiologist in 2021. In accordance with Act 141 of 2005 and Act 280 of 2009, ACCR is required to provide an annual update on Arkansas cervical cancer screening, incidence, and mortality data to the Arkansas Cervical Cancer Task Force. The registry needed to hire and train a new cancer epidemiologist, currently known as the Cancer Surveillance Manager, in time to provide the next data update to the Arkansas Cervical Cancer Task Force.

SOLUTION

In February 2022, ACCR utilized NPCR funding to hire a new Cancer Surveillance Manager/Epidemiologist who was tasked to prepare for the next Arkansas Cervical Cancer Task Force meeting on April 21, 2022. The Cancer Surveillance Manager underwent cancer registry training while preparing for the annual update by reviewing past presentations, performing literature reviews, and receiving guidance from former ACCR staff such as the last cancer epidemiologist.

The Cancer Surveillance Manager was able to provide a timely cervical cancer update on April 21, 2022, with an examination on relevant health disparities and geographic differences (urban/rural) among at-risk Arkansas females⁶. Since about 90% of cervical cancer cases are due to HPV infections⁷⁻⁸, an additional analysis was conducted to evaluate HPV-associated cervical cancer cases in Arkansas.

RESULTS

Data analysis showed that in 2018, ACCR data showed Arkansas had a higher incidence rate of cervical cancer compared to the US (AR age-adjusted rate: 10.2 per 100,000 population; US age-adjusted rate: 6.7 per 100,000 population). Among at-risk females in Arkansas in 2018, rural counties had a higher incidence rate than urban counties (Rural counties age-adjusted rate: 12.5 per 100,000 population; Urban counties age-adjusted rate: 8.9 per 100,000 population). After geographic regions were stratified by race/ethnicity for 2018, African American females in rural counties had a higher cervical cancer incidence rate compared to African American females in urban counties (AA rural age-adjusted rate: 14.8 per 100,000 population; AA urban age-adjusted rate: 9.0 per 100,000 population). White females in rural counties had a higher incidence rate than White females in urban counties (W rural age-adjusted rate: 12.2 per 100,000 population; W urban age-adjusted rate: 8.9 per 100,000 population). The counties with the 5 highest age-adjusted incidence rate for cervical cancer from 1997-2018 were among rural counties.

Behavioral Risk Factor Surveillance System (BRFSS) 2020 data for pap tests showed 70.6% of Arkansas females with a household income less than \$15,000 had the lowest percent of Pap tests completed in the past 3 years followed by 71.7% of females with a household income of \$15,000 to \$24,999. From 1997 to 2018, the overall age-adjusted incidence rate for HPV-associated cervical cancers was 9.85 per 100,000 population with the 5 highest incidence rates among rural counties with an age-adjusted incidence rate range of 15.3 per 100,000 population to 21.0 per 100,000 population.

Following the presentation with the Arkansas Cervical Cancer Task Force, the Cancer Surveillance Manager gained valuable insight for data points to include in future presentations, such as HPV vaccination rates in comparison to other states.

SUSTAINING SUCCESS

Arkansas is committed in sustaining partnerships and complying with requirements to increase cervical cancer screening and early disease detection by providing descriptive analysis using registry data.

STORY QUOTE

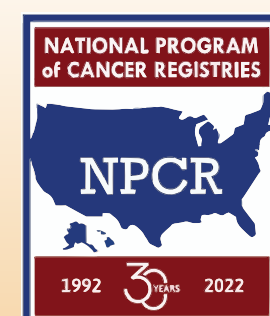
"Without designated funds from NPCR, the Arkansas Central Cancer Registry wouldn't have been able to hire a new Cancer Surveillance Manager in time to meet state law requirements of providing current data to the Arkansas Cervical Cancer Task Force. We are thankful for the opportunity that NPCR has provided us through funding so that we may continue to do such important work." – Lindsay Collins, ACCR Director.

REGISTRY CONTACT INFORMATION

501-661-2463
Arkansas Cancer Registry

REFERENCES

1. CDC, National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). *The Health and Economic Benefits of Cervical Cancer Interventions* (Updated 2021). Website: <https://www.cdc.gov/chronicdisease/programs-impact/pop/cervical-cancer.htm>
2. CDC, Cervical Cancer. *What Should I Know About Screening?* (Updated 2022). Website: https://www.cdc.gov/cancer/cervical/basic_info/screening.htm
3. Ama Buskwofie, Gizelka David-West, Camille A. Clare, A Review of Cervical Cancer: Incidence and Disparities (2020). *Journal of the National Medical Association* (112) 2, pages 229-232, DOI: <https://doi.org/10.1016/j.jnma.2020.03.002>
4. U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2021 submission data (1999-2018): 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 November 2021.
5. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2020 on CDC WONDER Online Database. Data are from the Multiple Cause of Death Files, 1999- 2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on April 5, 2022
6. Daniela Ramirez Aguilar, Arkansas Department of Health, *Cervical Cancer in Arkansas* (2022). Pdf: https://www.healthy.arkansas.gov/images/uploads/publications/Cervical_Cancer_Presentation_2022.p df
7. CDC, HPV and Cancer. *Basic Information about HPV and Cancer* (Updated 2022). Website: https://www.cdc.gov/cancer/hpv/basic_info/index.htm
8. CDC, Cervical Cancer. *Cancers Associated with Human Papillomavirus (HPV)* (Updated 2022). Website: https://www.cdc.gov/cancer/hpv/basic_info/cancers.htm



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention