

# 2020 NPCR MISSISSIPPI CANCER REGISTRY SUCCESS STORY

STORY TOPIC: Collaborative partnerships/projects

STORY CATEGORY: Public Health Impact

STORY TITLE: Addressing HPV-Related Cancers in Mississippi

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## SUMMARY

Mississippi has the lowest rates of HPV vaccinations in children in the United States and also has one of the highest rates of HPV-related cancers. To address this problem, the Mississippi State Department of Health began a Back-to-School push to increase vaccinations in children receiving their required seventh grade vaccination. Additionally, the American Cancer Society (ACS) led the effort to form an HPV Roundtable in the state to address issues in the areas of provider education, systems change, and parent and community education with a goal to see a vaccination rate of 80% by 2026.

## CHALLENGE

HPV can cause six cancers. According to the Centers for Disease Control and Prevention (CDC), HPV causes more than 90% of cervical and anal cancers, about 70% of the vaginal and vulvar cancers, 60% of penile cancers, and 60 to 70 percent of oropharyngeal (back of the throat) cancers.<sup>1</sup> Data from the *United States Cancer Statistics* shows that between 2013 and 2017 Mississippi had the third highest rate in the United States of newly diagnosed cancers that can be associated with an HPV infection.<sup>2</sup> Many, if not most, of the 2,497 cases of cancers diagnosed that may be associated with an HPV infection<sup>2</sup> could be prevented by preventing HPV. An HPV vaccination can help prevent the types of HPV that are most likely to cause cancer. The CDC recommends that children ages 11 to 12 receive the HPV vaccination. The vaccination is recommended up to the age of 26.<sup>3</sup> Unfortunately, Mississippi had the lowest rate, 34.8%, among U.S. states of children ages 13 to 17 receiving at least two doses of the HPV vaccination in 2018.<sup>4</sup>

## Sources:

<sup>1</sup>Division of Cancer Prevention and Control, Centers for Disease Control and Prevention, "Cancers Associated with Human Papillomavirus (HPV)." [www.cdc.gov/cancer/hpv/basic\\_info/cancers.htm](http://www.cdc.gov/cancer/hpv/basic_info/cancers.htm) updated September 3, 2020.

<sup>2</sup>U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2019 submission data (1999-2017): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; [www.cdc.gov/cancer/dataviz](http://www.cdc.gov/cancer/dataviz), released in June 2020.

<sup>3</sup>National Center for Immunization and Respiratory Disease, "Vaccinating Boys and Girls," <https://www.cdc.gov/hpv/parents/vaccine.html> reviewed August 15, 2019.

<sup>4</sup>The National Immunization Survey - Teen, Hyattsville, MD: Centers for Disease Control and Prevention. Created by [statecancerprofiles.cancer.gov](http://statecancerprofiles.cancer.gov) on 10/16/2020

## SOLUTION

Annually, the Mississippi Partnership for Comprehensive Cancer Control (MP3C) holds an annual conference to address cancer-related topics in Mississippi. Each year, during the “The Burden of Cancer” talk, the Mississippi Cancer Registry director shares information on cervical cancer diagnoses and deaths, as well as, HPV vaccination rates in the state to challenge partners to work for change. Additionally, the cancer registry publishes reports on HPV-related cancers on their website.

Mississippi is a state that requires certain vaccinations for school and daycare admission. The tetanus, diphtheria, and pertussis (Tdap) vaccination is required for students entering the seventh grade (ages 11 to 12). The Department of Health tried to increase HPV vaccination rates in students who get their school vaccinations at a health department clinic. They required training on the HPV vaccination for all staff to get buy-in from everyone at the clinic on the value of the vaccination. They changed the consent form to an “opt-out” of a “cancer prevention” vaccination. They changed their systems to maximize efficiency in giving the mandatory Tdap and optional HPV vaccination.

The American Cancer Society (ACS) led an effort to begin an HPV roundtable in Mississippi. The inaugural meeting occurred on November 19, 2019 and brought together public health, health providers, non-profit organizations, community members, researchers, and academic centers to coordinate efforts to address the burden of HPV-related cancers in the state and increase the utilization of the HPV vaccination. The roundtable officially launched on February 11, 2020. The Mississippi Cancer Registry participates in this effort to assist with ensuring the efforts are based on data. There are three main areas in which this group will work. These include systems change, provider education and recommendations, and increasing parent and community knowledge of the HPV vaccination preventing cancer. As part of this effort, ACS and the University of Mississippi Medical Center partnered in conducting an Extension for Community Health Care Outcomes (ECHO) telehealth project to assist pediatric and primary care providers with strong recommendations for the HPV vaccination in cancer prevention that they can use in their clinics.

## RESULTS

The school vaccination push prior to the 2019-2020 school years was a success. The health department’s HPV vaccination rate went from 45% in 2018 to 71% in 2019 among students receiving their mandatory Tdap vaccination. They continued the vaccination push prior to the 2020-2021 school year though COVID-19 presented some challenges. The data from this second push has not been released yet.

The HPV Roundtable groups began work in March and April of 2020. The Parent/Community workgroup has designed a logo for the roundtable and is in the final stages of developing a website to disseminate information. This group is also currently exploring the use of social media campaigns in the effort. Local cancer survivor story videos are in the process of being developed to be shared as part of the media campaigns.

The Systems Change group obtained 250 “Ask me how to prevent 6 cancers” buttons for International HPV Awareness Day on March 4 and distributed them health department staff across the state. They also are studying insurance coverage issues and access issues to the HPV vaccination in order to address any barriers found. They are also working on a data use agreement with Medicaid to identify providers giving the vaccination and how well they are doing to determine areas in which to focus interventions.

One of the major initiatives of the Provider Education group is the use of the ECHO for education. The initial ECHO in 2019 included 16 participants from pediatric clinics. During the eight sessions, the participants were

provided with information on data, providing strong recommendations on the HPV vaccination, changing practices in the clinic, and monitoring progress on HPV vaccinations in their clinics. The participants gave positive feedback on the ECHO. A new ECHO began in August 20 which includes eight participants from primary care provider offices. Additionally, the American Cancer Society provided posters and flyers on the HPV vaccination to the health department clinics before the school vaccination push. The Provider Education group is also exploring ways to utilize the electronic health records for parent/patient reminders and increased efficiencies in clinics that provide the vaccination.

#### SUSTAINING SUCCESS

The activities of the HPV Roundtable will be key to maintaining the success of the efforts that have already taken place in Mississippi. The push for the HPV vaccination with back-to-school shots will continue. The ECHO project will continue to provide assistance to providers in the state administering vaccinations. The roundtable will monitor the data on cancer diagnoses and immunizations to determine progress and areas of focus for the group's work.

#### REGISTRY CONTACT INFORMATION

Mississippi Cancer Registry

601-815-5482; <https://www.umc.edu/cancerinstitute/Cancer-Research/Cancer-Registries/Mississippi%20Cancer%20Registry/HOME-PAGE-CONTENT.html>