

2020 NPCR NEW HAMPSHIRE STATE CANCER REGISTRY SUCCESS STORY

STORY TOPIC: Childhood Cancer in New Hampshire

STORY CATEGORY: Public Health Impact

STORY TITLE: Childhood Cancer in New Hampshire

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SUMMARY

An ongoing investigation of pediatric rhabdomyosarcoma (RMS) in the seacoast region of New Hampshire has resulted in heightened concern in the state about pediatric cancer. Dr. Siegel's study of the geographic differences in childhood cancer incidence in the United States, which called out NH as having the highest rate, resulted in further attention from the media, as well as from state and federal politicians. In response, Governor Sununu appropriated funds in the state budget to study specific aspects of childhood cancer in NH. The funded projects are described here.

CHALLENGE

The question faced by NHSCR was how to best study childhood cancer in a way that would make an impact to the New Hampshire community.

SOLUTION

A menu of possible activities was developed, and specific items were chosen for implementation. The goal was to select activities addressing the questions surrounding childhood cancer in our area, and to provide new opportunities to inform and educate the public about pediatric cancer and associated cancer risk.

RESULTS

The activities that received funding during Fiscal Year 21 were:

A systematic literature review on the causes (e.g., environmental, genetic) of childhood cancer, including the most recent research published as well as unpublished early work presented at recent national and international conferences. We will write and publish (a) a systematic review article describing our understanding of the field, and (b) educational literature targeted to the public to help explain what is known about the causes of childhood cancer.

A detailed re-examination of the national data presented in Siegel's article, to address issues not fully explored in that paper. Specifically, we will analyze race-specific rates including those of Massachusetts and Pennsylvania which were not previously presented, and we will conduct hypothesis testing to show whether NH rates significantly exceed those of our neighboring states with similar demographic profiles and whether rates in the northeast region significantly exceed those of other regions.

Improved surveillance for childhood cancer in New Hampshire. We will add staff effort to ensure that case finding is complete, and we will explore issues of cross-border reporting that may affect rates.

Hosting an academic conference in New Hampshire on the etiology of childhood cancer. We will invite national and international researchers and state public health agencies to discuss current research and public health issues. We will focus on specific pediatric cancers of concern locally (e.g., rhabdo-myosarcoma); genetic syndromes; and environmental childhood cancer epidemiology. The conference will conclude with a more limited executive session, including selected stakeholders from the community and regional public health departments to discuss next steps. Educational literature for the public will be developed based on information and discussion at the conference and executive session.

Summarize and report radiation surveillance data. The Radiological Environmental Monitoring Program in New Hampshire has collected extensive radiation monitoring data from food, water, and other environmental samples around the Seabrook Nuclear Power Station. Analyzing and summarizing the data and developing educational materials might help alleviate public concern about existing risks.

Focus group study on issues faced by childhood cancer survivors and their families. The goal of this work will be to explore areas where families' experiences could be improved. Challenges and gaps will be identified and summarized to inform the development and improvement of programs to support pediatric survivors and their families.

Work on these strategies will begin this fall and will be completed by the end of June, 2021. The funding of this work illustrates the potentially big impact that cancer data can have in terms of attention to and allocation of funds for public health issues. Without the attention garnered by the release of the Siegel paper we would not have received this additional, one-time funding from the Governor and had an opportunity to explore childhood cancer issues in our state in such detail.

SUSTAINING SUCCESS

The results of these efforts will be made available to the public as far as possible in the form of educational materials and/or press releases, and where possible, they will form the basis of sustained efforts to work with the public on issues in childhood cancer.

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