

Dover Township

Childhood Cancer Investigation

Public Health Response Plan

This update is the first in a series being developed to give health care providers in Ocean County information on the ongoing activities related to the investigation of childhood cancer incidence in Dover Township. The series of updates is being prepared by the New Jersey Department of Health and Senior Services, as part of a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry. This first issue focuses on the Public Health Response Plan, which provides the framework for the environmental and cancer rate investigations, community and health professional education, and other related functions. Your input into these processes is valued and welcome.

Background

In August, 1995, in response to a request from the Agency for Toxic Substances and Disease Registry (ATSDR), the New Jersey Department of Health and Senior Services (NJDHSS) analyzed cancer incidence data on children living in the "Toms River" section of Dover Township, Ocean County

diagnosed with cancer between birth and 19 years of age, from the time period 1979 through 1991. The analysis found that for children under the age of five, the rate of brain and central nervous system cancer was statistically elevated compared to the state rates (3 cases observed vs. 0.4 cases expected in this population). These cancers were also found

Citizens Action Committee on Childhood Cancer Cluster (CACCCC), and the Cancer Ad Hoc Committee were formed. The NJDHSS and the ATSDR, together with the CACCCC and the Ocean County Health Department, developed a Public Health Response Plan to update and re-evaluate information on childhood cancer incidence, and to explore environmental issues of concern to the community.

Ocean County Childhood Cancer Cases, Birth to 19 years 1979 through 1991

| | Number Expected | Number Observed |
|-----------------------|-----------------|-----------------|
| All cancers | 216 | 230 |
| Brain/CNS | 39 | 54* |
| (Birth to five years) | 12 | 21* |
| Leukemia | 53 | 60 |

Dover Township Cancer Cases, Birth to 19 years

| | | |
|-----------------------|-----|----|
| All cancers | 43 | 56 |
| Brain/CNS | 8 | 11 |
| (Birth to five years) | 1.9 | 5 |
| Leukemia | 10 | 16 |

Toms River Cancer Cases, Birth to 19 years

| | | |
|-----------------------|-----|----|
| All cancers | 9 | 14 |
| Brain/CNS | 1.6 | 5 |
| (Birth to five years) | 0.4 | 3* |
| Leukemia | 2.2 | 4 |

* statistically significant

elevated among children in Ocean County, from birth to five years of age, and from birth to 19. Other cancer rates in children are found in Table 1.

As a result of community concern about these rates, the

Actions Planned under the Public Health Response Plan

NJDHSS and ATSDR have developed the Public Health Response Plan (PHRP) to begin a systematic process to compile and validate information on the occurrence of different types of childhood cancer in the community. Specific environmental issues of concern will also be examined in parallel to characterize the potential for past and current exposures in the community. The actions planned

in the PHRP are summarized below.

Childhood Cancer Incidence Analysis Health Consultation

This consultation includes two distinct activities. The first is the compilation of a complete, verified list of childhood cancer cases occurring since 1979, in accordance with the International Classification of Childhood Cancers, developed by the International Agency for Cancer Research. It will be followed by an updated analysis of cancer rates in Dover Township. The second activity is to conduct interviews of families of children with selected cancers to generate defined hypotheses for possible further epidemiologic investigation. Oversight for these actions will be provided by an expert panel being assembled by the NJDHSS. This consultation will be more fully described in a future update.

Ciba-Geigy and Reich Farm Health Consultations

These consultations will evaluate past and current human exposure pathways associated with the Ciba-Geigy and the Reich Farm Superfund sites. Existing information will be examined in cooperation with US Environmental Protection Agency (USEPA), the New Jersey Department of Environmental Protection (NJDEP), and local health and other agencies. When needed to better define current exposure pathways, supplemental environmental and/or biomedical monitoring will be undertaken. These consultations will be more

fully described in a future update.

Public Water Supply Health Consultation

This consultation will provide an interpretive summary of the comprehensive analysis of samples of the United Water Company/Toms River public water system taken beginning in March 1996. It will include complete reporting of chemicals analyzed, results, guidelines, historical data, and a review of relevant toxicologic and epidemiologic information. This consultation will be more fully described in a future update.

Health Education

In addition to the four consultations, NJDHSS and ATSDR will work with the CACCCC, the Ocean County Health Department and the Cancer Ad Hoc Committee to plan and conduct an education program for the community and local health professionals. This and future updates are a part of that effort for

health care providers. This is expected to be an on-going activity through the completion of the PHRP components.

Additional Sources of Environmental Contamination

In addition to the two Superfund sites in Dover Township, there are other sources of environmental contamination in this area. NJDHSS and ATSDR will work with the NJDEP and the USEPA to compile a compendium of environmental contamination

sources in Dover Township.

Addition of New Jersey to the National Study of Brain Cancer Incidence

The ATSDR is conducting a multi-state study comparing brain cancer rates with proximity to hazardous waste sites. New Jersey will be added to the ATSDR National Study of Brain Cancer Incidence Near National Priorities List (NPL) Sites. ATSDR anticipates completing this study in 1997.

To better serve the community during this investigation, the NJDHSS will be maintaining a field office on the grounds of Community Medical Center. The telephone number is 505-4188.

***Dover Township Childhood
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This update is supported in whole by funds from the Comprehensive Environmental Response, Compensation and Liability Act trust fund through a cooperative agreement with the Agency for Toxic Substances and Disease Registry, Public Health Service, US Department of Health and Human Services.