

**Citizen's Guide to the  
Childhood Cancer Incidence Update:  
A Review and Analysis of Cancer Registry Data, 1979-2000  
Dover Township (Ocean County), New Jersey  
January 2003**

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The NJDHSS recommends that it continue its childhood cancer surveillance in Dover Township, updating this report when an additional five years of cancer incidence data are available from the New Jersey State Cancer Registry. The NJDHSS and ATSDR should also continue their educational and outreach efforts in Dover Township.

**Citizen's Guide to the  
Childhood Cancer Incidence Update:  
A Review and Analysis of Cancer Registry Data, 1979-2000  
Dover Township (Ocean County), New Jersey  
January 2003**

In September 1997 the New Jersey Department of Health and Senior Services (NJDHSS) released a report that reviewed all available childhood cancer incidence data for Dover Township (Ocean County), New Jersey. Those data, which covered the time period 1979 through 1995, indicated that there were significantly higher rates of certain childhood cancers than expected in Dover Township and the Toms River section of the township. This led the NJDHSS and the Agency for Toxic Substances and Disease Registry (ATSDR) to conduct a case-control study to attempt to define what environmental exposures might be associated with those increases. This study is provided in the January 2003 report, *Case-Control Study of Childhood Cancers in Dover Township (Ocean County), New Jersey*. The case-control study report also recommended that the 1997 report be updated when an additional five years of childhood cancer incidence data are available.

***What is the purpose of this Update?***

This update report provides analysis and interpretation of the full twenty-two years (1979 through 2000) of childhood cancer incidence data for Dover Township and Toms River, including recent (1996-2000) data not in the earlier report. It was developed in order to determine if there have been any changes in incidence rates, or if there are any time trends in incidence, in Dover Township and Toms River.

***What cancer cases were evaluated in this update?***

Cancers evaluated in this update, as well as the earlier report, include: all cancers combined, brain and central nervous system cancers, sympathetic nervous system tumors, Wilms' tumor, malignant bone cancer, soft tissue sarcomas, leukemias and lymphomas. Cases were included in the evaluation if the person was less than twenty years of age, and a resident of Dover Township, at the time of diagnosis.

***Are there any changes to the information reported in 1997 as a result of the re-analysis of the earlier data?***

The NJDHSS found that the total number of childhood cancer cases during the period 1979 through 1995 was 87, not 90 as originally reported. Four cases were found to be not eligible for the study, and one case was identified more recently that was not included in the earlier analyses. Additionally, with the release of year 2000 U.S. census data, population estimates were revised. However, these changes did not affect any of the original conclusions. For the period 1979 through 1995, the rates of total cancers and leukemia in females in Dover Township were significantly elevated when compared to state rates.



***What do the more recent data indicate about childhood cancer incidence?***

There were 25 new childhood cancer cases diagnosed in Dover Township between 1996 and 2000. For Dover Township, the average annual number of cases was similar in the 1979-1995 and the 1996-2000 time periods. The percentage of children less than five years of age newly diagnosed with cancer decreased from 26 percent of the total to 16 percent. In Toms River there was a more noticeable decrease in the average annual number of cases among all children. This is primarily due to a drop in the percentage of young children with cancer, from 50 percent of the total in the earlier time period to zero in the more recent five years.

When compared to New Jersey rates for the 1996-2000 time period, rates remain higher than expected in Dover Township for several cancers, including brain and central nervous system cancers and leukemia in females. However, there are no statistically significant elevated rates of any of the cancers studied in Dover Township or Toms River. In Toms River, leukemia is elevated when compared to state rates; however, no child under age five was diagnosed with cancer in the 1996-2000 time period.

***Are there any time trends over the period of study?***

Time trends are difficult to interpret. For all cancers combined, Dover Township rates rose above state rates from the mid-1980s through the mid-1990s, and again in the late 1990s. Toms River rates were more variable, with defined peaks above state rates in the mid to late 1980s, mid-1990s, and the late 1990s.

***What are the conclusions of the report?***

The conclusions reached in the earlier study remain valid regarding the significant elevations in certain childhood cancers in Dover Township and Toms River in the time period 1979 through 1995. During the more recent study period of 1996 through 2000, there were no significantly increased rates of cancer in children in either Dover Township or Toms River, although rates of some cancers remain higher than expected. The absence of cancer in children less than five years of age in Toms River in the more recent time period suggests that cancer rates may be declining.

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