Investigation of Cancer Incidence Among Adults in the Hamlet of Hillcrest, Broome County, New York, 1990 - 1997

BACKGROUND

- Investigation of newly diagnosed cancer cases among adults (ages 15 or older) living in the Hamlet of Hillcrest, Broome County (Census Tract 122.01 and Block 5 of Census Tract 126.00), was undertaken for the years 1990-1997. This investigation was part of the follow-up to the finding of an unusual pattern of cancer in children in Hillcrest.

METHODS

- The actual observed numbers of adults diagnosed with cancer during the years of the study, by sex and type of cancer, were counted from the New York State Cancer Registry.

- The expected numbers of adults diagnosed with cancer during the years of the study, by sex and type of cancer, were calculated based on the age and sex distribution of people living in Hillcrest.

FINDINGS

Cancer Cases in Males

- Overall, the actual number of men diagnosed with cancer was not significantly different from the number expected (80 cases observed; 72 cases expected).

- Looking at specific types of cancer, a statistically significant excess was found in the number of men diagnosed with cancer of the prostate (31 cases observed; 20 cases expected). No other specific type of cancer showed a statistically significant excess or deficit in numbers of men diagnosed.

Cancer of the prostate is the most frequently diagnosed type of cancer among men. It is a disease primarily of older men, with the majority of cases diagnosed in men over the age of 65. While the causes of prostate cancer are unclear, it is believed to be associated with dietary fat intake. Hormonal, reproductive and certain occupational factors may also play a role.
Prostate cancer can be detected through the use of various screening tests. Since these tests are designed to detect prostate cancer at an early stage, when the disease is most treatable, the widespread use of screening tests in a community would be expected to result in more cancers being detected at an early stage. The prostate cancers diagnosed in Hillcrest tended to be detected at an earlier stage than average.

Cancer Cases in Females

- **Overall,** the actual number of women diagnosed with cancer was not significantly different from the number expected (56 cases observed; 64 cases expected).

- Looking at **specific types of cancer,** no specific type showed a statistically significant excess or deficit in the number of women actually diagnosed compared to the number expected.

Comparison with Childhood Cancer Findings

- The specific types of cancer, including leukemia and lymphoma, that were shown in the previous study to be elevated among children in the study area, were not statistically significantly elevated among adults in the study area. Additional review showed that these types of adult cancers did not show any unusual patterns in the types of cancer, ages of the people diagnosed, timing of diagnoses, or geographical location of cases’ residences at the time of diagnosis.

INTERPRETATION

- The investigation of adult cancer incidence shows no overall excesses in total cancers among men or women. Looking at numerous cancer types individually for men and women, the analysis shows only one type of cancer in excess, prostate cancer among men. Due to the importance of recently introduced screening tests for detecting prostate cancer, statewide variations in prostate cancer rates likely reflect differences in the utilization of these tests. Comparing these findings to the findings in the earlier report on children, this investigation of adult cancer incidence shows no statistically significant elevations of the types of cancer found to be elevated in children.

NEXT STEPS

- This information sheet summarizes the third of four studies evaluating cancer incidence and/or environmental factors in the Hamlet of Hillcrest. The fourth report will be an environmental assessment of the study area. This report will be written after evaluating the cancer findings and environmental issues following the approach and specific steps outlined in the Unusual Disease Patterns Investigation Protocol, developed as part of the Cancer Surveillance Improvement Initiative in December 2000. This protocol is available on the Internet at [www.health.state.ny.us/nysdoh/cancer/csi/nyscsii.htm](http://www.health.state.ny.us/nysdoh/cancer/csi/nyscsii.htm). Work on the environmental assessment is currently underway.

For further information on cancer or this adult cancer incidence study, please contact:
Ms. Aura L. Weinstein, NYSDOH, Cancer Surveillance Program (518) 474-2354