

REPORT TO THE COMMUNITY

St. Lucie, January 25, 1999

Purpose of study -- To see if the numbers of brain and central nervous system (CNS) cancers in St. Lucie are higher for this size community.

Study population and period -- The focus of the study is the population of St. Lucie County. The study period included 1981 through 1997. We looked at neuroblastoma, a type of central nervous system cancer (CNS) in children through age 9. We also looked at brain and other CNS cancers in children through age 19.

Source of information -- We gathered and confirmed information from the Florida Cancer Data System, the Florida Pediatric Tumor Registry, and hospitals and physicians record. We verified information supplied by the public through these sources.

Comparison with a reference population -- We compared the number of cases found in St. Lucie with the number of cases that would be found if the state rates were applied to the population of St. Lucie.

Results -- For neuroblastoma, 7 cases were observed. We expected 4.9 cases. The observed number of neuroblastoma cases is nearly one and one-half (1.43) times the expected number. The calculated probability of observing 7 or more cases is .22.

For brain and other CNS cancers, there were 22 cases observed. We expected 16.1 cases. The observed number of brain and other CNS cancer cases is nearly one and one half (1.36) times the expected number. The calculated probability of observing 22 or more cases is .07

More than half (13) of the brain and other CNS cases were diagnosed in the last three years of the study period. Most of them were from St. Lucie; belonged to the white race; and were less than 9 years old. There are more astrocytoma and glioma than other types of brain and CNS cancers in these thirteen cases.

When we looked further, we found that two other neuroblastomas were diagnosed during this time. We also found that 9 cases (including one of the neuroblastomas) were diagnosed within a seven-month period.

Conclusion -- Over the entire period from 1981 through 1997, the actual number of cases is NOT significantly higher than the expected number for a community of this size. However, there are more cases than may have been expected from 1995 through 1997.

We should maintain vigilance to identify new cases so they can be treated early. Continued monitoring of childhood brain and other CNS cancers in St. Lucie is recommended.

Raul Quimbo
Bureau of Environmental Epidemiology (HSEE)
Bin # A08, Bald Cypress Way
Tallahassee, FL 32399-1712

Tel #: (850) 245-4444 Ext. 2835
E-mail: raul_quimbo@doh.state.fl.us