FREQUENTLY ASKED QUESTIONS (F.A.Q.)

ST. LUCIE CANCER ASSESSMENT – SUPPLEMENT 2026

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Why did the Florida Department of Health conduct a cancer investigation?

The Florida Department of Health (FDOH) conducted a supplemental assessment after St. Lucie County residents raised renewed concerns about possible increases in glioblastoma, a rare brain cancer. This review updates a 2019 investigation and looks at the newest available data to see if glioblastoma is happening more often than expected.

What is FCDS?

The Florida Cancer Data System (FCDS) is the state's cancer registry. The FCDS collects information on all cancers diagnosed in Florida, as required by law (s. 385.202, Florida Statutes). The FCDS has been collecting data since 1981. These data help to track cancer trends and supports research into the possible causes of cancer. For more information on FCDS visit fcds.med.miami.edu.

What is an unusual increase in cancer cases?

An unusual increase in cancer cases refers to more cases of the same type of cancer occurring in a group of people, in the same area, over a specific period of time, than would normally be expected.[1] Because cancer is common, it is possible for several people in a community to be diagnosed with cancer around the same time simply by chance.

How often do cancer concerns lead to investigations?

Confirmed cases of unusual increases in cancer cases are rare. In a review of 576 cancer investigations nationwide over 20 years, 72 showed a significant increase in cancer rates, and three of those were linked to a possible exposure. Ultimately, one investigation identified a clear cause.[2] This means that while community concerns are taken seriously, most perceived increases in cancer cases do not have an identifiable environmental cause.

How are cancer investigations performed?

To identify whether more cancer cases are occurring than expected, epidemiologists compare the number of diagnosed cases in a community with the number expected based on statewide cancer rates. A statistical tool called Standard Incidence Ratio (SIR) helps determine whether the difference is greater than what might occur by chance. For more information visit the FDOH Cancer Concerns Website.

What are SIR and confidence intervals?

The Centers for Disease Control and Prevention recommends using a Standard Incidence Ratio (SIR) to evaluate whether cancer rates in a community are higher than expected. SIR compares the number of observed cancer cases in an area with the number of cases that would typically be expected cases based on statewide cancer rates.

Statisticians use confidence intervals to help determine whether any increases are meaningful or if they are likely due to chance. For an increase in glioblastoma to be considered statistically significant, the SIR must be greater than one (more cases occurred

[1] National Cancer Institute. (2018). Cancer Clusters. Retrieved October 7, 2026, from https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/cancer-clusters-fact-sheet
[2] Goodman et al. (2012). Cancer clusters in the USA: What do the last twenty years of state and federal investigations tell us? Retrieved October 7, 2026, from https://doi.org/10.3109/10408444.2012.675315

than expected) AND the 95 percent confidence interval would need to exclude one (increase is unlikely to be due to random variation).

None of the reviewed areas showed a statistically significant increase in glioblastoma cases.

What is the most recent data available for analysis?

Currently, 2023 data are the recent year of cancer data available in the Florida Cancer Data System. Cancer data are released about 2 years after the close of each year (e.g. 2025 data will be available in 2027). This allows Florida's data to be of the highest quality and completeness.

Provisional records may be incomplete, duplicative, or missing key information. Using provision data for analyses is not recommended, as provisional data may be inaccurate or inconsistent.

What are the results of the investigation? Is there a cancer concern in the Treasure Coast region?

The results from the most recent analysis show the number of observed glioblastoma cases were not significantly* greater than what would be expected for each given area based on the population in that community.

*Significance refers to statistical testing to determine if a change is statistically meaningful (e.g., not due to random variation).

How does the FCDS know if there is or is not a significant change when the observed cases have increased?

FCDS evaluates both the size of the increase and if the increase is stable and not due to chance. Even if the SIR is slightly above one, the change may still be small and fall within normal variation.

The SIR compares the number of observed glioblastoma cases to the number they would expect based on statewide rates, while adjusting for age differences in the population. A SIR of one (1) is when the observed number of cases equals what is expected and a SIR greater than one is when there are more cases than expected.

FCDS calculates a 95% confidence interval around that SIR. This range accounts for typical random fluctuations in small numbers of cases. If the entire confidence interval is above one (1), it indicates a statistically significant increase, meaning the rise is unlikely due to chance alone.

In the case of areas evaluated in the report, even though the SIR is above one (1), the actual difference in case numbers over the full-time period is small, (e.g., six (6) extra cases over ten (10) years for ZIP code 34952). The confidence interval includes one (1) showing this change is not statistically significant.

What prompts an investigation into a cancer concern?

Communities often bring forward concerns when they notice what seems like an unusual pattern of cancer cases. Health departments take these concerns seriously and explore if there is a need for an investigation based on available data.

How many cases would signal a significant concern?

There is no specific number of cancer cases that automatically signals a significant cancer concern in a community. Meaningful increases depend on several factors, including population size, cancer type, and what is known about environmental or behavioral exposures in the area. An increase in cases may appear alarming in a small population but may not represent an unusual pattern once these factors are considered together and data are analyzed statistically. Public-health scientists use tools like the Standard Incidence Ratio (SIR) and confidence intervals to determine whether an increase is likely due to chance or represents a real increase in cancer occurrence.

Additionally, suspected cancer concerns in a community may not lead to the identification of a causal disease association or an associated environmental contaminant. Cancer is not a single disease; it includes many different forms, each with its own causes and risk factors. Because of this complexity, there is no national threshold or set number of cancer cases that automatically indicate an elevated cancer rate in a specific group, geographic area, or timeframe.

How is the Florida Department of Health working to identify cases that were not diagnosed in Florida?

The FDOH is working with reporting facilities in St. Lucie County and surrounding counties to ensure all the cancer cases for 2022 and 2023 have been accounted for and are included in the registry.

Is there an environmental risk for glioblastoma in the Treasure Coast region?

Based on current scientific evidence, no environmental hazard in the Treasure Coast region has been shown to cause glioblastoma. Nationally, no causal association between environmental hazards and glioblastoma has been established.[3]

What were the results of DOH's environmental investigation?

The Bureau of Environmental Public Health reviewed drinking water quality in public water systems and available private well data and found that contaminant levels are below harmful threshold and are considered safe.

The Bureau of Radiation Control (BRC) monitors radiation around the St. Lucie Nuclear Power Plant and found no increase in environmental radiation levels. Radiation released from the plant remains far below regulatory limits.

Is the St. Lucie Nuclear Power Plant dangerous, or related to glioblastoma diagnoses?

No. There is no evidence that radiation released from the St. Lucie Power Plant is causing any harm or is at all linked to glioblastoma diagnoses in the St. Lucie area. Radiation levels around the power plant remain far below regulatory limits.

[3] Ostrowski et al. (2025). Environmental Hazards and Glial Brain Tumors: Association or Causation? Retrieved October 7, 2026, from https://doi.org/10.3390/ijms26157425

Federal rules require nuclear facilities to continuously monitor radiation in the environment and verify that public exposure remains below levels that could harm the surrounding community. These rules ensure that both airborne and liquid releases meet highly conservative standards designed to keep public exposure extremely low.

The St. Lucie Power Plant, managed by Florida Power & Light operates a comprehensive monitoring program around the plant, routinely sampling air, water, soil, vegetation, and fish to detect even the smallest changes in radiation levels. State and federal officials independently verify these results, reinforcing multiple layers of oversight. Together, these federal requirements and FDOH BRC support robust monitoring efforts which provide strong assurance that radiation around the St. Lucie plant remains well below regulatory limits and safe for the community.

Who should I contact regarding concerns about city water supply?

The Bureau of Environmental Health and the Florida Department of Health in St. Lucie County are working with the Florida Department of Environmental Protection to evaluate the public drinking water supplies and their testing over the past decade. These facilities are required to perform extensive chemical and biological testing every quarter and are excellent sources of information.

Why do some ZIP Codes appear to show an increase in glioblastoma age adjusted rates that county age adjusted rates do not show?

The statistical methods used do not fully account for the population change during the time period assessed. Annual age-adjusted population estimates at the ZIP code level required for the analyses are not available, and those used do not account for the recent population increase. Due to the small numbers of glioblastoma cases in these areas, the rates can be unstable and change from year to year. The SIR compares these observed changes overtime to what would be expected and found the trend in glioblastoma cases was not statistically significant.

Why do cancer diagnoses seem to follow a pattern, such as two individuals from the same neighborhood or individuals with the same profession diagnosed close in time?

Current information shows that approximately one out of three Americans will develop cancer in their lifetime, and cancer will affect three out of four families.[4] The risk of developing cancer increases with age; as the population ages, more cases of cancer are expected in our communities. Cancer, like any other chronic condition, can occur in a neighborhood by chance. While some individuals diagnosed may have similar cancer types, the underlying causes can vary and are not always fully understood. In many situations, these patterns occur by chance and do not reflect a common environmental or occupational exposure.

[4] American Cancer Society. (n.d.). *All About Cancer*. Retrieved July 14, 2026, from https://www.cancer.org/cancer.html

Why does a change in the population impact the number of people diagnosed with cancer?

As a population grows, the number of cancer cases is also expected to increase. When there are more people, more cases will be diagnosed because there are more individuals who could develop cancer. This means that the total number of cancer cases in an area can rise even when the actual risk of cancer has not changed.

What are the next steps?

Moving forward, the Florida Department of Health in St. Lucie County will continue to work with the state health office and other state and local partners to monitor and review relevant public health data to better understand local glioblastoma cases and address the needs of local residents.

What are some additional resources for information on cancer concerns?

- Agency for Toxic Substances and Disease Registry (ATSDR)
  - https://www.atsdr.cdc.gov/
- National Center for Environmental Health (NCEH)
  - https://www.cdc.gov/cancer-environment/php/guidelines/
- National Institute for Occupational Safety and Health (NIOSH)
  - https://www.cdc.gov/niosh/hhe/about/