

Dear school community members,

**Re: Investigation of alleged cancer cluster at Miami State School**

There was a concern raised with the Gold Coast Public Health Unit about a potential cancer cluster in June 2023. Queensland Health takes concerns around potential cancer clusters very seriously and a thorough assessment was undertaken by the Gold Coast Public Health Unit following the [Queensland Health's Non-Communicable Disease Cluster Guidelines](#).

The elements of the investigation included the following:

- **Environmental assessment**
  - o A portion of the Miami State School is built over a former refuse tip and the investigating team reviewed the history of this site. In addition, the team examined the results of all available testing conducted on site following tip closure.
- **Epidemiological assessment**
  - o The team investigated if there were higher rate of cancers in the school area (Mermaid Waters and Miami suburbs) compared with the rest of Gold Coast and with Queensland.
- **Literature review of scientific evidence**
  - o Reviewed the evidence for any links between the development of relevant cancers and identified environmental contaminants.

The findings of this investigation were:

- **Environmental assessment**
  - o No significant environmental contaminants that have been implicated in causing the identified cancers (carcinogens) have been identified on the school site other than buried asbestos (with an identified risk to ovarian cancer and a well-known risk for cancers of the lung and its linings) which would not pose a risk to staff as the asbestos has been left undisturbed.
  - o A site inspection by Environmental Health Officers identified no other environmental hazards of concern in or around the school that could be responsible for the development of cancer.
- **Epidemiological assessment**
  - o Miami and Mermaid Waters (the catchment area of the school) do not have a higher rate of cancers (breast, uterine, ovarian, prostate and all cancers) compared to the Gold Coast and to Queensland.
- **Literature review**
  - o Evidence shows that more than 18 years is required for breast cancer to develop after an exposure to a cancer-causing substance (carcinogen). No staff member with a reported breast cancer diagnosis had a long enough time frame (latency period) between starting work at the school and their cancer diagnosis. It is highly unlikely that the development of their breast cancer can be attributed to an exposure at the school site.

- Cancer Australia advises that except for skin cancers other than melanoma, breast cancer is the most commonly diagnosed cancer, with more than 69% of breast cancers diagnosed in those aged 40 to 69 years old.
- Our team reviewed the list of carcinogenic (cancer causing) agents which the International Agency for Research on Cancer (IARC) identifies as having sufficient or limited evidence for breast cancer. None of these listed environmental agents have been identified at the school site. This includes organochlorides such as dieldrin, which have been specifically tested for and were not detected.
- Cancer Australia reports that there is inconclusive evidence for environmental chemical exposures increasing the risk of developing breast cancer
- There was therefore no biological plausibility for development of the identified cancers to be caused by an exposure at the school.

Based on all these findings, the Gold Coast Public Health Unit investigating team concluded that this does not constitute a cancer cluster and no further investigation is required.

For further information about cancer clusters, here are some useful resources:

- [Cancer Cluster Frequently Asked Questions](#)
- [Cancer Council Queensland](#)
- [Cancer Australia, Risk factors for breast cancer: A review of the evidence 2018](#)
- [WHO, International Agency for Research on Cancer, Evaluation of carcinogenic risks to humans.](#)

You can contact the Gold Coast Public Health Unit on 5667 3200 if you have any further questions or concerns.

Yours sincerely,



Anne Cowdry

**A/Director**

**Gold Coast Public Health Unit**