

FACT SHEET

CONNECTICUT DEPARTMENT OF
PUBLIC HEALTH

Pratt & Whitney North Haven: Investigation of a Possible Brain Cancer Cluster



BACKGROUND

February 2001

The International Association of Machinists and Aerospace Workers (IAMAW) Local Lodge 707 contacted the Connecticut Department of Public Health to assist them in evaluating a concern of their members and families regarding a possible cluster of brain cancer cases at the North Haven facility. Those who were concerned had developed a list of persons they suspected had brain cancer who had worked at the facility. Since the number of cases was consistent with a need for follow-up, the DPH conducted a formal investigation during the summer and fall of 2000. This investigation was conducted with full cooperation of the management of Pratt and Whitney.

There were several purposes in conducting the study:

- Confirm the diagnoses of these cases medically. If tumors were found, see if they were malignant brain tumors.
- Determine if there were any other cases.
- Determine whether there were more cases of malignant brain cancer occurring in P&W employees than would be expected based on comparison with the overall population in Connecticut.

Main Findings and Recommendations

- Many of the cases initially suggested by the union were ruled out because they were not malignant brain tumors. Some were brain tumors that were either benign (non-cancerous) or were a metastasis from another type of tumor. The brain is a common site to which a malignant tumor (a metastasis), which begins in another part in the body, can spread. Only malignant brain tumors were considered part of the investigation. Benign brain tumors have different risk factors.
- There were four cases of primary, malignant (cancerous) brain tumors confirmed among white male employees at the P&W North Haven facility during the period 1991-1999. Three of these were the same type. The four individuals with primary brain tumors had worked in either the Vane or Blade Grinding Departments before 1990.
- There was not good information on the numbers and characteristics of people who had worked at P&W North Haven over the years. Therefore it could not be determined if the rate of malignant brain tumors was higher than would be expected based on comparison with the Connecticut general population.
- Two of the four brain tumor cases occurred during 1999, so ongoing monitoring for brain tumors will be conducted. Since diseases may appear to cluster in time by chance, one way to evaluate this is to continue monitoring.
- Employees of P&W North Haven should follow traditional recommendations regarding a healthy lifestyle, eating nutritious foods, not smoking, and getting exercise.



Main Findings and Recommendationscont.

- If a person has questions about changes in their health status, he or she should follow-up with their primary care physician.
- P&W Health and Safety personnel and all employees should continue to assure the safety of the work place by making sure that potential health hazards are controlled.
- The Connecticut DPH is committed to continuing this investigation, will continue to monitor for additional cases, and will continue to work with P&W management and machinists union.

What Do We Know About Malignant Brain Tumors?

The causes of most malignant brain tumors are not known. Researchers are trying to solve this problem. Ionizing radiation is the only certain risk factor that has been identified. A wide range of environmental, lifestyle, and genetic factors are currently being studied to see if they could increase a person's chance of developing a brain tumor. In most cases, patients with a malignant brain tumor have no identifiable risk factors. Often exposures that may have contributed to the development of malignant brain tumors could have occurred many years before the disease is recognized. The disease could be the result of several risk factors acting together.

Some suspected risk factors for malignant brain tumors include:

- Family history of cancer
- Dietary factors, such as eating cured meats
- Medical history, such as radiation exposures, or exposure to certain viruses
- Occupational exposures, such as working in oil refining, the rubber industry, or with embalming fluids

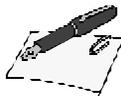


Some studies had looked at malignant brain cancer in machinists/cutters, but they were not consistent in finding an increased risk.

Exposures that contributed to the development of malignant brain tumors usually have occurred many years before the disease is recognized. Although all the cases in this investigation worked in grinding, we don't know that this process was associated with their diseases. Many changes have been made over time in materials used in grinding, so current recommendations for safety standards for workers who engage in grinding operations are mostly to prevent respiratory and skin diseases, not cancer.

If you have additional questions about this investigation, would like to report cases you may be aware of, or would like more information, please contact:

**State of Connecticut Department of Public Health
Division of Environmental Epidemiology &
Occupational Health
410 Capitol Avenue, MS#11OSP
PO Box 340308
Hartford, CT 06134-0308
Phone: (860) 509-7744
Fax: (860) 509-7785**



If you have additional questions about this investigation, or would like more information, you may contact:

**IAMAW Lodge 707
Chief Health & Safety Representative
Debbie Belancik, Gary Frattalone
(203) 239-5877**

Or

**North Haven Site, Environmental Health &
Safety Manager
(203) 234-4582**

