

State of Connecticut Department of Public Health

PUBLIC HEALTH

FACT SHEET #2

Environmental & Occupational Health Assessment 410 Capitol Avenue, MS #11OSP PO Box 340308, Hartford, CT 06134-0308

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

Background:

September 2001

In April 2001, a fact sheet on the status of a brain tumor investigation was distributed to current and former employees of the Pratt & Whitney plant at North Haven. This indicated that the investigation found that there were four cases of primary malignant (cancerous) brain tumors confirmed among employees at the North Haven plant during 1991- 1999. These cases were confirmed from a list of thirteen suspected cases that the union (IAMAW) local lodge 707 had supplied to the Connecticut Department of Public Health (DPH). A number of gaps in the information made it impossible to determine if the occurrence of the brain tumors was associated with working at P&W. The recommendation was that the investigation continue because of the lack of sufficient information and the fact that two of the cases occurred in 1999. Since April, family members have contacted DPH or Local 707 to report additional suspected cases among those who worked at the North Haven plant.

Current Findings and Recommendations

The investigation has now confirmed that from 1978-2000 there have been 14 cases of primary, malignant brain tumors diagnosed among persons employed at the North Haven plant. Twelve of the 14 cases had the same type of brain tumor.

Malignant brain tumors take many years to develop. Therefore, if the tumors were related to some type of exposures, persons diagnosed with brain tumors in the 1990s would most likely have had those exposures in the 1950s through the 1970s.

Although there is still incomplete information on the numbers and characteristics of people who had worked at P&W North Haven plant in the past, P&W is continuing to search for records to determine if there is enough information to conduct a formal study.

This more comprehensive study could help determine whether the number of brain cancer cases is greater than would be expected. Such a study also could investigate whether the brain cancers are in any way associated with working at P&W. This type of study would require additional resources that are not available at either DPH or UCONN, which have been involved in the investigation to date.

What Further Steps Are Being Taken?

- DPH had requested assistance from the National Institute for Occupational Safety and Health (NIOSH) in continuing this investigation. NIOSH is working with the group in reviewing findings and recommendations.
- At the recommendation of DPH and UCONN, P&W has hired two experts on occupational studies to see if it is possible to conduct a more complete study. DPH and NIOSH reviewed the qualifications and past work of these two researchers and recommended them for the feasibility study. The feasibility study will review the information/data that DPH and Pratt have collected, and will recommend whether a more complete study can be conducted based on the information available. A summary of the researchers' backgrounds is included below.

Where do we go from here?

We expect the feasibility study to be completed in late October or early November. Once we review the findings, a decision will be made whether to proceed with the comprehensive study. We will share this information with P&W employees.

Who is conducting the feasibility study?

The feasibility study is currently being conducted by Gary M. Marsh, Ph.D., and Nurtan A. Esmen, Ph.D. Historically, Dr. Marsh and Dr. Esmen have had the opportunity to collaborate on similar types of studies.

Dr. Marsh is a professor of Biostatistics at the University of Pittsburgh, Graduate School of Public Health. He has over 150 publications in the area of biostatistics, occupational/ environmental epidemiology, quantitative risk assessment, statistical computing, and health services evaluation. He also directs occupational epidemiologic studies to investigate the long-term health effects of exposure to various agents such as formaldehyde, acrylamide, and arsenic.

Dr. Esmen is a professor and chairman of the College of Public Health at the University of Oklahoma. Educated in Europe and in the United States, he received his Ph.D. from the University of Pittsburgh in Chemical and Air Engineering, while working as aerosol physics research staff in the Department of Occupational Health. He has published more than 100 articles and abstracts in the area of occupational and environmental hygiene, aerosol physics, air pollution, epidemiology, and related subjects. His research interests include the application of engineering principles and mathematics to occupational and environmental health problems, with special interests in aerosol physics and reconstruction of exposures.

Resources for Questions or to Report Cases

If you would like to report cases you may be aware of, or if you would like to request the previous Fact Sheet, or if you have questions about this investigation, please contact: Connecticut Department of Public Health Division of Environmental Epidemiology and Occupational Health 410 Capitol Avenue, MS #110SP, 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