

Understanding Your Breathing Test Results

There are many ways that a doctor can tell if your lungs are working properly. First, the doctor can do a physical exam using a stethoscope. The doctor will listen to hear if any of the “breath sounds” are abnormal. For example, wheezing, a high-pitched sound produced by airflow through narrowed airways, is an example of an abnormal sound. The doctor can also take a picture of your lungs using a chest x-ray or CAT scan to look for abnormalities in the structure of the lungs, such as an infection like pneumonia. However, these two tests can still miss important problems. For this reason, a breathing test, called **spirometry**, is often done to further evaluate the health of the lungs.

Spirometry can tell you how much air is going into the lungs and how rapidly air is inhaled and exhaled in the lungs (airflow).

One of the benefits of spirometry testing (also referred to as “pulmonary function testing”) is that it can detect abnormalities in lung function even when no signs or symptoms of disease are evident. An example of this would be a cigarette smoker without shortness of breath who shows a mild decrease in airflow. In this case, the spirometry test detects disease at an early stage (before the onset of symptoms), so treatment (and smoking cessation, in this case) can be initiated earlier. Spirometry can also be used to help establish a medical diagnosis when signs or symptoms of disease are evident. An example of this would be a person who has developed wheezing. If decreased airflow is detected along with wheezing, this can be an indicator of asthma. Spirometry can also be used to assess the effectiveness of medical treatment. If a medication is given to open narrowed airways, it should be monitored by spirometry to ensure that the normal airflow is restored.

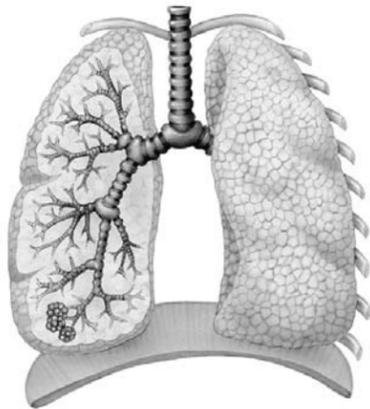
Spirometry is performed by deeply inhaling and forcefully exhaling into a spirometer (the device that records the various measurements of lung function). There are two measurements that are crucial in the interpretation of spirometry results. The first is called the **forced vital capacity (FVC)**. This is a measurement of lung size (in liters) and represents the volume of air in the lungs that can be exhaled following a deep inhalation. The second is the **forced expiratory volume-one second (FEV1)**. This is a measure of how much air can be exhaled in one second following a deep inhalation. You will also see another number on the spirometry test results — the **FEV1/FVC ratio**. This number represents the percent of the lung size (FVC) that can be exhaled in one second. For example, if the FEV1 is 4 and the FVC is 5, then the FEV1/FVC ratio would be 4/5 or 80%. This means the individual can breath out 80% of the inhaled air in the lungs in one second.

The three key spirometry measurements (the FVC, FEV1 and FEV1/FVC ratio) for a given individual are compared to reference values. The reference value is derived from healthy individuals and tells the doctor the values that would be expected for someone of the same sex, age and height. To find the reference value on your spirometry report, look for the column marked “reference” or “predicted” value.

Interpretations of spirometry results require comparison between an individual’s measured value and the reference value. If the FVC and the FEV1 are within **80%** of the reference value, the results are considered normal. The normal value for the FEV1/FVC ratio is **70%** (and 65% in persons older than age 65). The lower the measured value is compared to the reference value, the more severe the lung abnormality is. (See table below.)

When the FVC is abnormal, this can be caused by **restrictive** lung diseases. Restrictive diseases are so named because there is a

restriction that is not allowing the lung to fill to normal size. Asbestosis (scarring of the lung due to asbestos exposure) is an example of a restrictive lung disease. Abnormalities of the FEV1 and FEV1/FVC are the result of a decrease in the **air-flow through the lung**. This may be caused by **obstructive** lung diseases. Examples of obstructive diseases are **emphysema** and **asthma**. There can be situations where there are both restrictive and obstructive diseases present.



The Worker Health Protection Program includes spirometry as part of the free medical examination. Many participants have learned of, or have confirmed, problems with their breathing after participating in the program. To review, spirometry can be used for several purposes — the early detection of lung disease, establishing a medical diagnosis or monitoring the effectiveness of medical therapy. A physician can also use the results to determine whether additional lung tests are needed to diagnose conditions detected by spirometry abnormalities.

SPIROMETRY TEST	NORMAL	ABNORMAL
FVC and FEV1	Equal to or greater than 80%	Mild 70-79% Moderate 60-69% Severe less than 60%
FEV1/FVC	Equal to or greater than 70%	Mild 60-69% Moderate 50-59% Severe less than 50%

PACE/Queens College WHPP Health Watch

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All Workers at Paducah and Portsmouth to Receive Beryllium Testing

Recent findings of elevated beryllium levels in components of the gaseous diffusion process equipment at the Portsmouth gaseous diffusion plant led the Worker Health Protection Program to request that beryllium testing be expanded to **all** workers at Paducah and Portsmouth. DOE has now agreed to this. If you have not received a beryllium sensitivity test yet, please call 1-888-241-1199 to set up an appointment for a free test.

Elevated levels of beryllium were announced in January 2004 while the **Portsmouth** GDP contractor was conducting beryllium surveys as part of its responsibilities under the DOE Chronic Beryllium Disease Prevention Program Final Rule (10CFR Part 850). The local union at Portsmouth (PACE Local 5-689) was working with the plant health and safety staff to identify areas of concern for sampling. The finding of elevated levels of beryllium in process equipment (specifically the compressor blades) seemed to take at least some of the local company officials by surprise. While the compressor blades at the **Paducah** plant have not been tested, officials at Paducah believe that similar results will be found at the sister plant. Discussions between WHPP representatives and the DOE along with letters of support from Senator Voinovich (R-OH) led to DOE agreeing to expand the beryllium testing program. The DOE Inspector General’s office is also investigating this issue.

In the past, the WHPP program has restricted beryllium testing (a blood test) only to individuals who reported working in certain areas of the plants (e.g., the machine shop) or reported that they had worked with beryllium. The survey data identifying contamination within compressor blades raised questions about whether beryllium contamination may have occurred throughout the four major process buildings on the Portsmouth site. This gave support to the idea that beryllium testing should be expanded to all GDP workers. The fact that individuals with positive beryllium tests did not appear to have been limited to the work areas or jobs outlined in the original needs assessment lent further support to this plan.

The **Oak Ridge** K-25 testing had already been expanded to include everyone since there were an overwhelming percentage of participants in the screening program who had reported working with beryllium or in areas with beryllium.

The identification of beryllium in the major gaseous diffusion process buildings is also a concern for the current workforce. Local union health and safety representatives at both Paducah (PACE Local 5-550) and Portsmouth (PACE



Senator Voinovich (R-OH) helped expand beryllium testing to all workers

Local 5-689) are currently working with the plant officials to refine their sampling plans and to more clearly determine what will be considered ‘beryllium areas’.

PACE International Union along with CPS, Inc., a consultant to PACE, will continue to work with the local unions at both Portsmouth and Paducah to determine the nature and extent of the beryllium contamination. It is unclear why the compressor blades have elevated levels of beryllium. A DOE representative indicated that the levels were just trace contamination and not anything specifically requested by the DOE in the manufacture of those parts. However, an aluminum industry representative contends that beryllium contamination levels in the GDP aluminum compressor blades were higher than “background” levels, according to a report in the Louisville Courier Journal.

It is unclear how much beryllium from compressor blades becomes airborne during maintenance or repair and therefore could be an exposure of concern to either former workers or the current workforce. More sampling will be done at both plants and the WHPP medical testing for beryllium has been expanded to include all workers.

If you have any information that you would like to share or have questions about getting a beryllium test, please contact us at 1-888-241-1199.



Message from Dr. Markowitz, WHPP Project Director

Worker Health Protection Program Participates in International Consortium on the Early Detection of Lung Cancer

Our early detection lung cancer project is now the largest such program in the United States. Through the enormous work of PACE union local and international personnel as well as the medical screening staff, we have screened 4,500 workers for lung cancer at the three DOE gaseous diffusion plants since November 2000. We take great pride in this program, which is larger than any lung cancer screening program offered by any medical center, medical school, or hospital in the country. No other union or employer even offers lung cancer screening, to our knowledge.

It is essential that our program findings contribute to improved understanding of the usefulness of chest CAT scans for the early detection of lung cancer. Consequently, we have joined the International Early Lung Cancer Action Project (I-ELCAP), a group of 24 medical centers in the United States, Europe and Asia that are conducting lung cancer screening with the use of a low dose CAT scan. Selected results of each program are being pooled in order to allow an improved and more powerful statistical portrait of the results of this screening technique. The consortium, led by Cornell Univer-

sity Medical School, meets twice per year.

The results of I-ELCAP are excellent. Among I-ELCAP centers, 26,577 people were initially screened with a chest CT scan, and there have been an additional 19,555 annual repeat screenings. Of the total of 376 lung cancers detected through these screenings, 82% of cancers were at the earliest stage of development (Stage I). Of the 376 people with lung cancer, 81% underwent surgical removal. Among those followed for the next 8 years, only 4% have died of lung cancer. For lung cancer, normally a highly lethal disease, these results are very encouraging.

However, the use of the low dose chest CT scan for early lung cancer detection is not yet an accepted screening technique in the general population and has not yet been endorsed by the American Cancer Society and other authorities. We await final proof of its effectiveness in reducing the death rate from lung cancer. But, working on a global basis, we hope to obtain critical answers sooner rather than later. With 160,000 people expected to die of lung cancer in the U.S. in 2004, there is no time to waste.

Screening Begins for Construction Workers at Paducah and Portsmouth GDP'S

A consortium led by Eula Bingham, PhD, professor, environmental health, at the University of Cincinnati Medical Center, that includes the National Building & Construction Trades research arm, The Center to Protect Workers' Rights; Duke University; and Zenith Administrators, began providing work history interviews and medical screening exams for former Portsmouth Gaseous Diffusion Plant (GDP) construction workers in January 2004. An office in Paducah, KY opened April 14, 2004 for an identical work history interview and medical screening program for former Paducah GDP construction workers.

Former Portsmouth and Paducah GDP construction workers may call the Program Office toll-free at 1-888-464-0009 for more information.

This consortium has been providing medical screenings of former construction workers at the Oak Ridge Reservation since 1999. The Oak Ridge program is phasing-out and will end by June 1, 2004.

WHPP Success At-A-Glance (as of 05-30-04)

No. of callers	12,046
No. of exams completed	10,058
No. of workshops completed	339
No. of participants who attended workshops	3,406

If you haven't taken advantage of the WHPP free medical screening exam, you should call 1-888-241-1199, to schedule an appointment. Once you have had your exam and received your results, you may qualify for the WHPP Early Lung Cancer Detection Program. A mobile CT scan unit rotates between the three Gaseous Diffusion Plant union halls approximately every two weeks. The number to call to schedule a CT scan is 1-866-228-7226.

Senate Acts to Help Nuclear Workers Through Reforms to Federal Compensation Act

The United States Senate has passed major reforms to the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) which will transfer processing of claims filed for occupational illnesses from exposure to toxic substances from the Department of Energy (DOE) to the Department of Labor. The amendment will direct the Department of Labor (DOL) to pay the so called "Subtitle D" claims directly, instead of requiring claimants to go through state workers' compensation programs. This legislation was attached to the FY 05 Defense Authorization Act (S. 2400) on June 17, 2004 after debate and a voice vote.

The legislation is now headed to the House-Senate conference committee on the defense bill where, over the summer, the fate of the legislation will ultimately be decided. DOE and the Office of Management and Budget have opposed this legislation. Sick workers, unions, and many state workers' compensation agencies support this legislation. The outcome of this reform effort hangs in the balance while the conference committee deliberates.

Senators Jim Bunning (R-KY) and Jeff Bingaman (D-NM) led the effort to pass this legislation. The legislation enjoyed bipartisan support from Republican senators such as Lamar Alexander (TN), George Voinovich (OH), Mike DeWine (R-OH), and Pete Domenici (NM) and Democrats such as Ted Kennedy (MA), Patty Murray (WA), Tom Harkin (IA) and Hillary Clinton (NY). Senator Bunning chaired two hearings of the Senate Energy Committee in Washington, DC and one in Paducah, Kentucky to explore the cause and cure for the snail's pace in processing claims, and to find a way to ensure a "willing payor" for valid claims accepted by the Energy Department's physicians panels. He noted at the March 30, 2004 hearing: "I hope our hearing today will bring to light a way for us to end the backlog of thousands of cases that have not received compensation." The hearings indicated that there was support for moving the program to DOL across the political spectrum.

During the debate on the floor of the Senate, Bunning repeatedly pointed to the Department of Labor (DOL) as a model. Under Subtitle "B" of EEOICPA, DOL has paid \$830 million to over 10,000 of the 55,000 claimants thus far. Another 16,000 have been sent to NIOSH for radiation dose reconstruction. DOL has processed over 95% of the 55,000 federal claims within its area of responsibility. In contrast, the DOE has issued medical determinations for work-related illnesses for 3% of its 24,000 claims for exposure to toxic substances, and, as of mid June, DOE had secured only four payments. Senator Bunning noted that DOE has received \$95 million for claims processing from Congress to date.

"I hope our hearing today will bring to light a way for us to end the backlog of thousands of cases that have not received compensation." Senator Jim Bunning (R-KY)

As background, the **DOL** handles **federal** EEOICPA compensation claims under Subtitle B that cover radiation-related cancers, silica, & beryllium disease. Under EEOICPA Subtitle D, the **DOE** handles requests for assistance with **state**

workers' compensation claims related to workplace exposure to toxic substances. DOE's physician's panel evaluates whether illnesses are work-related and where a positive finding is made, DOE is supposed to assist claimants filing state workers' compensation claims.

Leading up to this legislative action, Congress had put DOE's compensation program under a microscope:

- The General Accounting Office, under a mandate legislated by Senators Bingaman and Bunning, has found that for 20-33% of its cases DOE lacks a "willing payor" – an entity it can direct to pay state workers' compensation claims. Without a willing payor, claims determined to be work-related by the DOE physician panel may not ever be paid. These cases can and will be rejected by the individual state compensation boards, and there is nothing that DOE can do to ensure the claim is actually paid. Claims in Ohio, Kentucky, Alaska, Iowa, Colorado and several other states do not appear to have a willing payor, according to GAO. Report can be obtained at www.gao.gov/new.items/d04515.pdf.

- The Senate Finance Committee, led by Charles E. Grassley (R-IA), questioned whether DOE lawfully hired a claims processing contractor, SEA, on a non-competitive basis through the Navy. Grassley obtained records showing SEA charged up to \$401,000 per year for certain individuals working on claims processing, and developed a software system costing nearly \$5 million that DOE consultants indicated could be bought off the shelf for roughly \$50,000.

- Leon Owens, former president of PACE Local 5-550, twice testified before the Senate Energy Committee urging comprehensive reforms that would transfer the DOE program to DOL as a means to speed state claims processing and assure that claimants will be paid. Leon serves on the NIOSH Advisory Board on Radiation and Worker Health. (See sidebar on Advisory Board). The Advisory Board audits the quality of radiation dose reconstructions for claims filed under Subtitle B. It also advises NIOSH on whether there are classes of employees at a DOE facility who should be designated as members of the Special Exposure Cohorts (SEC), and given an automatic presumption in favor of compensation for 22 listed cancers.



Senator Jim Bunning (R-KY)

Rule for Special Cohort Member Petitions Issued May 2004

DOE contractor workers employed at sites where radiation dose reconstruction is not feasible will now have a new route to pursue compensation claims under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA). EEOICPA provides members of the "Special Exposure Cohort" (SEC) with an automatic presumption that their illness is work-related if they have incurred one of 22 "Specified Cancers" after beginning employment at a DOE or a DOE vendor facility. The list of cancers can be found at www.cdc.gov/niosh/ocas.

SEC status has already permitted claimants with one of the 22 cancers who worked at Portsmouth, Paducah and Oak Ridge K-25 Gaseous Diffusion Plants to receive over \$400 million in payments. Payments are \$150,000 per person. These sites were originally included in the legislation as "special exposure cohort" members. DOE workers from all other sites, the legislation specified, would have to petition to change their status to "special exposure cohort."

In the 3 1/2 years since the EEOICPA legislation was passed, no new groups were added to the SEC because final rules for petitioning had not been issued. On May 28, 2004, the Department of Health and Human Ser-

vices (HHS) finally published the Special Exposure Regulation. The final rule includes:

- The procedures for adding classes of employees to the Special Exposure Cohort where (1) it is not feasible to estimate with sufficient accuracy the radiation dose that the class received; and (2) there is a reasonable likelihood that such radiation dose may have endangered the health of the members of the class.

- Who can petition to be in such a class (DOE contractor workers, a survivor, a union or a designated representative).

- What must be included in the petition (the groups of affected workers, time frame when radiation records are not available or workers were not monitored, and some evidence that radiation records are not available.)

Petitions are evaluated by the National Institute for Occupational Safety and Health, and reviewed by the Advisory Board on Radiation and Worker Health (See sidebar). If a petition is approved by the Secretary of Health and Human Services, it is transmitted to Congress for a 180 day review. Petition forms are available from the WHPP program, by calling 1-800-433-2916, and from the NIOSH web site at www.cdc.gov/niosh/ocas.

Members of the Advisory Board on Radiation & Worker Health (4/03)

- Chairman Paul Ziemer, health physicist, former Assistant Secretary of Energy for Environment, Safety & Health (1990-93), Past President, Health Physics Society
- Henry Anderson, MD, Chief Medical Officer for Occupational and Environmental Health, State of Wisconsin
- Antonio Andrade, senior nuclear engineer, Los Alamos Laboratory
- Roy DeHart, MD, Director of Vanderbilt Center for Occupational and Environmental Medicine, Vanderbilt University, former member of the ORAU Board of Directors
- Richard Espinosa, sheetmetal worker, KBR Group, Los Alamos, NM, Sheetmetal Workers Union Local #49
- Mike Gibson, electrician, former President of PACE Local 5-4200, DOE Mound facility
- Mark Griffon, health physicist, CPS Environmental, PACE consultant
- Robert Pressley, retired engineer, Oak Ridge Y-12 facility
- James Melius, MD, DrPH, epidemiologist, New York State Laborers Health and Safety Fund, former Branch Chief at NIOSH
- Wanda Munn, retired nuclear engineer, DOE Hanford site
- Leon Owens, cascade operator, USEC, Inc., former President, PACE Local 5-550, Paducah, KY
- Genevieve Roessler, health physicist, radiation consultant, editor of Health Physics Society newsletter and website

The Advisory Board on Radiation and Worker Health

The Advisory Board on Radiation and Worker Health was created by Congress in 2000 to advise the Secretary of Health and Human Services and the National Institute of Occupational Safety and Health on the energy workers' compensation program. The Advisory Board's membership must reflect "a balance of medical, scientific and worker perspectives." Several Board members have familiarity with concerns of radiation-exposed workers, including: Mark Griffon, a health physicist, who advises the PACE Worker Health Protection Program; Leon Owens, former president of PACE Local 5-550 (Paducah); and Mike Gibson, former president of PACE Local 5-4200 (Mound facility). The Advisory Board:

- ▲ Provides advice on dose reconstruction and the criteria for deciding compensation for radiation-related cancers;

- ▲ Audits dose reconstruction cases. The Board has announced it will audit 2 1/2% of all dose reconstructions and has hired Sanford Cohen & Associates to support their audit; and

- ▲ Advises whether to approve or deny special exposure cohort petitions.

As of June 2004, the Advisory Board has held 25 meetings. Meetings are open and the Board receives public comments. The Board presently has 12 members; at least 8 of the 12 members have conflict of interest waivers which allow them to serve, but they must excuse themselves from the decision making process for certain sites where they have been employed.

NIOSH Site Profiles Provide Technical Information For Use in Dose Reconstruction for Radiation-Related Cancers

Under the Energy Employees Compensation Program Act of 2000 (EEOICPA), the National Institute for Occupational Safety and Health (NIOSH) is the federal agency charged with estimating individual radiation doses among workers with radiation-related cancers at Department of Energy (DOE) nuclear weapons sites and its predecessor agencies.

NIOSH has contracted with Oak Ridge Associated Universities (ORAU) to develop Site Profiles that will be used as a supplement to, or substitute for, individual monitoring data. The Site Profiles will summarize and document historical practices at the various DOE sites and will be used by NIOSH to evaluate the total occupational radiation dose for individual EEOICPA claimants.

The Site Profiles are divided into five major Technical Basis Documents

- Site Description
- Occupational Medical Dose
- Occupational Internal Dose
- Occupational External Dose and
- Occupational Environmental Dose

The **occupational medical dose** is the cumulative dose from x-rays administered as part of the site physical examination program.

The **internal dose profile** includes information on internal exposures from primary radionuclides of concern (such as neptunium or uranium), areas at the site that may be of concern for potential internal exposures, and a description of the bioassay monitoring program over time and the limitations of detection for the radionuclides of concern.

The **occupational external doses** include information on the primary sources of external dose (gamma, neutron, beta, or x-rays) on the site over time. The document also includes a history of the monitoring program (e. g. film or TLDs, frequency of use, detection limits and other relevant data).

The **occupational environmental dose** is that which a worker received from working outside where there was environmental exposure.

In general, the documents produced to date have been superficial in describing the sites and the internal and external dose data. The documents assume the best possible scenario – that the contractors had reliable and adequate dose monitoring programs and do not take into account deviations from normal operations.

NIOSH has been holding meetings for the workers at the various sites to explain the documents and how they will be used to reconstruct dose for cancer claimants. The meetings give

workers a chance to critique the document and point out gaps such as failure to include accident/incident databases, any errors, whether all processes are covered and the failure to include tiger team reports. (Tiger team reports are results of comprehensive investigations of a site's health and safety and radiological program that were conducted in the early 90's.) NIOSH is taking minutes of the meetings and these will be posted on the web site (**Mark: what is address?**)

Two WHPP sites have taken an active role in these meetings so far: the Portsmouth, OH gaseous diffusion plant and the Idaho Environmental and Engineering Laboratory (INEEL) in Idaho Falls, ID. Another PACE site, Hanford, also had representatives attending the meeting and preparing comments. At all three meetings, the workers were vocal in their criticisms of the document and specified just where omissions and errors occurred. Both

sites took their own minutes and are submitting them in writing along with action items to NIOSH and the President's Advisory Board on Radiation and Worker Health. (See Advisory Board sidebar and list of Board members in this issue of HealthWatch).

Workers Requesting Assistance from DOE Office of Worker Advocacy for State Workers' Compensation Claims	
Total number of requests submitted	24, 413
Number of requests submitted from:	
Paducah GDP	2, 919
Oak Ridge GDP	1, 944
Portsmouth GDP	1, 064
INEEL	945
Argonne West	55

UPDATE ON FEDERAL COMPENSATION CLAIMS (as of 6/10/04)	
Claims filed	55,056
Total number of payments made	11,108
Amount of compensation paid	\$834,414,695
Claims with final approval	12,437
Claims tentatively approved	13,204
Claims on the way to NIOSH for dose reconstruction	16,613

After more than 3 years, interest in the WHPP Early Lung Cancer Detection Program has remained very strong. The toll-free number still rings all day long, keeping our main scheduler, Rosa, very busy. We continue to scan new people and to do repeat CT scans for those needing follow-up. As of May 2004, over 4,500 former and current gaseous diffusion plant workers were scanned on the mobile unit. Over 10,700 scans have been completed since November 2000!

Amy Manowitz, Program Coordinator, gave a presentation at the Early International Lung Cancer Conference in April 2004, about the extraordinary participation rates in the WHPP early lung cancer screening program. Ms. Manowitz reported that almost 9 out of every 10 eligible workers (88%) have been scanned or are scheduled to be scanned the next time the mobile unit returns to the needed location.

The Early Lung Cancer Detection Program appointment show rate is also incredibly high, according to Ms. Manowitz. Nine out of every 10 appointments are kept. Of those who do not show for a particular appointment the first time around, most are rescheduled and subsequently scanned.

About one third of the lung cancer program participants who are scanned learn that they have nodules (spots) on their lungs that need further evaluation and are asked to come back for a follow-up scan. If the nodule seen on the initial scan is neither immediately suspicious nor obviously benign, we call this an "indeterminate" nodule and the individual is invited back for a full-dose scan just at the level of the nodule (called a "nodulography"). If, after this closer look, the nodule is still indeterminate, a 3 and/or 6 month and a 12 month follow up scan is done. Our program has been very successful in encouraging participants to stay with the program once they need follow-up. When we looked at the compliance rates, we found that, in every instance, whether it was the first nodulography or the 3, 6, or 12 month follow-up appt, over 95% return for the recommended scan.

In addition, we had a very limited number of people who dropped out of the program after their initial scan showed an indeterminate nodule. Only 47 people have dropped out so far which means 97% of the participants with indeterminate nodules completed their follow up. The main reason participants dropped out was that they decided to follow up with their own doctors, in some cases because the mobile unit was too far for them to make repeated trips.

Several factors contribute to the extremely high participation and compliance rates in the WHPP Early Lung Cancer Detection Program. First, given the concern about past exposures at the gaseous diffusion plants, the GDP workers who we screen have a heightened concern about the risk of lung cancer. Secondly, the union involvement in the program creates a trust in the program and is a tremendous motivator for people to participate. Also, as with the WHPP medical screening program, participants are eager to get an objective medical evaluation from doctors not associated with DOE. The fact that DOE fully funds the program and allows us to offer the CT's at no cost also contributes to the high participation rates.



With regard to follow up compliance, the Queens College staff tracks this special group and is very persistent in calling people to encourage them to come to their appointments. Also, when we are having trouble locating a person because their telephone number has changed or they have moved, the union hall staff has been extremely helpful in tracking people down, sometimes even driving long distances to actually knock on someone's door or calling a friend of that person so that we don't "lose" anyone who needs follow-up. And finally, the fact that legislation exists that makes compensation for lung cancer more readily available to energy workers, provides a further incentive for follow-up on nodules that may be suspicious for cancer.

If you've had your WHPP physical and are interested in participating in the early lung cancer screening program, call toll-free, 1-866-228-7226, to find out if you are eligible.

Letter from Earl Pate, WHPP ELCD Participant, June 11, 2004

Thanks to the PACE program, the WHPP mobile CT unit and Queens College, I am a cancer survivor. I had a CT scan at Oak Ridge on June 12, 2003. I was called back for a second scan June 17. My family doctor, Dr. Donnie Parker, received the report from Queens College on the second scan. The next morning, Dr. Parker made an appointment with Dr. Henschen, a pulmonary specialist. By the time I went to see Dr. Henschen, I had received the films from Queens College; Dr. Henschen looked at the films and scheduled a PET scan to verify what the spot was.

"Thanks to the PACE program, the WHPP mobile CT unit and Queens College, I am a cancer survivor."

- Earl Pate, K25 GDP Workers

The PET scan confirmed cancer. An appointment was made with Dr. Barry Frame, the lung surgeon. I had a check-up with my heart doctor, Dr. Harry Bishop, to see if my heart could stand the stress of the operation. Dr. Frame checked the lymph nodes to see if the cancer had spread. Dr. Frame called and reported the lymph nodes were clear. This was on Friday; we set up the operation for three days later on Monday, July 21, 2003. Dr. Frame removed the upper lobe of my left lung. I went home on the afternoon of the fifth day.

I urge all nuclear workers to join the WHPP program. It could give them more years of life.

**Thank you, WHPP,
Earl Pate
K25 Gaseous Diffusion Plant Worker**

Message from Bruce Lawson, K25 Retiree and WHPP Ground Team Member

I am a 58 year-old retiree from the K-25 Site. I worked for 21 years in site maintenance, with the last nine also serving as a Union Health and Safety Representative.

I joined the Worker Health Protection Program soon after the medical testing it started in 1999. I helped the Oak Ridge Ground Team set up an office and assistance program for the medical screening program participants. My two days per week soon grew to four, sometimes even more. I also spend many evening and weekend hours answering questions and concerns at home, in stores and almost everywhere I go, after people learned that I am associated with the program.

Our office works closely with the Department of Energy/Department of Labor Resource Center in Oak Ridge. We are often the first point of contact for participants filing workers' compensation claims. We refer many cancer victims and their surviving spouses to the Center after explaining the Energy Employees Occupational Illness Compensation Program Act. At the same time, we get referrals from the Resource Center for the WHPP program. We often explain how to respond to information requests from DOL/DOE, and suggest ways to find information needed by potential claimants. We also assist people with their exposure histories since many do not remember most of the chemicals nor toxic substances at K-25. Although the amount of compensation is not as much as it should be, many times it can make a great difference in the life of a pensioner or widow who is barely surviving. Their gratitude is heartwarming and uplifting.

This has been one of the most rewarding experiences of my life. I truly enjoy helping people through the maze of bureaucratic hurdles and often see them gain monetary compensation. Even more rewarding, is the experience of an office visit or a "thank you" call from someone whose life was saved by the physical exam or CT scan.

There is also the downside. All too often I have seen my



"This has been one of the most rewarding experiences of my life." - Bruce Lawson, K25 Ground Team Member

former K-25 coworkers suffering from an advanced disease that could probably have been prevented had they learned about it earlier. The latency period (the time from first exposure before a disease first appears) for many of our exposures is now "up" and the results are often horrible. We see former workers who haven't seen a doctor nor had a physical exam since they terminated years ago. With the latency period ending for so many former workers, it would be a terrible injustice to all of us for DOE to discontinue the screening program. The physical exams and CT scans should be repeated at least every three to five years. I hope the DOE realizes the importance of this and keeps our program going.

I am happy to say that the good side of this job far outweighs the bad. It is truly great to get up and look forward to going to WORK!!!

Letter from Gregory K. Rucker, WHPP ELCD Participant

To Whom It May Concern:

I just wanted to take a few moments and write a short letter of thanks to your fine group. Because of the alertness and the expertise of the radiologist, it is very possible that my life was extended. In early May, I was scheduled for my first CT scan at the PACE union hall in Piketon, Ohio. A week later I received a letter stating that I indeed have some small nodules on my lung but this was not the greatest concern of the radiologist. I was advised to seek medical attention on an urgent basis for an aortic aneurysm detected on the screening CT.

The next day I contacted my family doctor. He agreed with the radiologist that we should seek a vascular specialist. I was put in contact with Dr. Robert Michler at Ohio State University in Columbus, Ohio. After more testing and review of my medical history, Dr. Michler agreed

"I just wanted to take a few moments and write a short letter of thanks to your fine group. Because of the alertness and the expertise of the radiologist, it is very possible that my life was extended."

- Gregory Rucker Portsmouth GDP worker

that I did have an aneurysm of the ascending aorta and did indeed require surgery to remove it. After only a couple of weeks and a few more tests, I was scheduled for open heart surgery.

On June 23, I entered OSU Hospital for my surgery. All went well and as I write this letter almost 3 weeks later I'm doing quite well and getting better at home. I just want to close this letter one more time thanking the WHPP Program for what they're doing. From the administrative personnel to the radiologist, I owe a great deal of gratitude and I must say that this program needs to stay intact, totally!

**Gregory K. Rucker
Portsmouth Gaseous Diffusion Plant Worker**