Omnibus Appropriations Bill for 2009 Assures Funding for Former Worker Programs and Early Lung Cancer Detection at Mound, Fernald and the GDPs

President Barack Obama signed the Omnibus Appropriations Bill for 2009 (H. R. 1105) on March 11 which assures funding of the Former Worker Medical Screening Program for another year. Nationwide, the program will have a budget of $17.6 million – the largest to date. The Worker Health Protection Program (WHPP) participants are deeply grateful for the many efforts by members of Congress who passed this legislation. Thanks also to all the local union leaders who took the time to meet with and inform their Congressional delegations of how essential the Former Worker Medical Screening Program is and the importance of extending the lung cancer screening to sites not yet reached by the WHPP Early Lung Cancer Detection Program.

How Are We Doing?
Results of a survey distributed to ORNL and Y-12 lung cancer screening program participants show continued satisfaction with the ELCD Program. Virtually all (99%) of enrolled participants rated their overall ELCD Program

Looking Ahead
Currently, the WHPP ELCD is only available to ORNL and Y-12 workers but in the late summer/fall of 2009, we expect to significantly expand the program to former Mound and Fernald workers and to resume the program at the three GDP sites. The program for ORNL and Y-12 workers will remain at the Oak Ridge ATLC union hall and returning and newly enrolled K-25 workers will receive their scans there. The self-propelled mobile unit used for the 2000-2006 GDP ELCD program will be refurbished and put back on the road (with a brand new state-of-the-art multislice scanner) to service workers from the Portsmouth and Paducah GDPs, as well as the Mound and Fernald workers.
NIOSH Study Examines Radon Exposure Levels Among Former Fernald Workers

A study funded by NIOSH was recently completed by researchers at the University of Cincinnati (UC). UC researchers looked at radon exposure levels in employees who worked at the Fernald Feed Materials Production Center (FMPC) between 1952 and 1988. Past studies had found a higher than expected amount of lung cancer deaths among Fernald workers compared to the U.S. general population (Cragle, 1996). Because radon causes lung cancer, researchers wanted to estimate the levels of exposure to radon at the site. Two significant (and previously unknown) sources of radon were revealed in this study: the K-65 Silos and the Q-11 Silos. Based on the NIOSH study findings, researchers believe more than half of Fernald workers were exposed to a low level of radon.

The study included 7,143 workers from 1952 to 1988 who were not monitored for radon exposure. Exposure levels were approximated by estimating the amount of waste that was stored in the silos and the levels of radon decay products throughout the site. This information was put into a mathematical model that estimated radon exposure for each work area and work shift.

To learn more or to get a copy of the NIOSH worker notification, visit: www.cdc.gov/niosh/oerp/fernald or call 1-800-CDC-INFO. You may also get detailed information by contacting the Fernald Medical Screening Program at 513-367-1333 and speaking to Ray Beatty or Allen Callaway.

ORNL/Y-12 Medical Screening and Lung Cancer Screening Program Gets A Boost from Local Newspaper Story

On January 14, 2009, Knoxville News Sentinel senior reporter, Frank Munger, came to the ATLC union hall to meet with Worker Health Protection Program (WHPP) participants and hear their stories, hoping to motivate others to get the free physical and, if eligible, participate in the WHPP Early Lung Cancer Detection Program. The phones have been ringing off the hook ever since.

Ed Mee, WHPP local coordinator for ATLC, had contacted Mr. Munger because of a downward trend in the number of people coming for physicals and/or calling in to express an interest in the low-dose CT scan program. Ed’s hunch was that it was not a lack of interest in the program but rather a need to reach more workers who hadn’t heard about the program. Based on the number of new calls since the article ran, Ed’s intuition was right. In just the first week after the story was published, the ATLC union hall and Queens College received over 200 new calls.

The Munger story highlighted both WHPP detected lung cancer cases as well as additional findings not related to lung cancer, both of which participants told Munger saved their lives. The main focus of the Early Lung Cancer Detection Program (ELCD) is to detect lung cancer at an early, more treatable stage. However, since the low-dose CT scans from the neck to the waist, the radiologist often notes findings outside the lung. So far four thyroid cancers and three kidney cancers have been detected by the lung cancer screening program. Many cardiovascular problems have also been detected, some of which needed urgent follow-up.

Ralph Dial, an 85-year-old retiree from Y-12 and ORNL, got married again - two years after a malignancy was discovered in his left lung, a part of which was removed. “I’m just getting started,” he said. “I don’t feel quite as young as I did the first time, but I feel well.” (See Ralph Dial letter to Dr. Markowitz on p. 3)

John Poole’s low-dose CT scan detected an ascending aorta aneurysm. Upon further evaluation by his personal physicians, (continued on page 8)
WHPP Lung Cancer Screening Program Enters Its Ninth Year With Continued Success

(continued from page 1)

experience as either good, very good or excellent (almost two thirds, 63%, thought the program was “excellent”; 28% rated the program as “very good”). The most frequent positive comment was the courtesy shown by all WHPP ELCD staff, including the CT technician, Queens College schedulers and the union hall staff -- Howard Lawson and Larry Jones, both former workers of ORNL. The most frequent criticism was the trouble participants had with understanding the radiology report. In the upcoming year, ELCD staff will work on a “Guide to Understanding Your Radiology Report” which will explain the most common findings on the CT scan reports. Please note, the ELCD Medical Director is available and more than happy to answer any specific questions concerning individual CT scan reports.

Program Protocol and Follow-up Compliance

About one-third of program participants who have an initial CT scan are asked to return in three and/or six months to follow-up on what we call “indeterminate nodules” -- white spots on the chest CT scan that are not immediately suspicious for lung cancer but are also not obviously benign (not cancer). In these cases, the best way to determine whether the finding is of concern is to follow the nodule and check for growth or changes in any other characteristics (such as density or shape). Due to a detailed tracking system and the diligence of Queens College support staff, follow-up compliance in the GDP program was excellent and remains so in the ORNL/Y-12 lung cancer screening program.

Our compliance rate for follow-up CT scans was 97% for the period August 2006 through June 2008. (Of 570 participants who were recommended to return in three or six months for follow-up of indeterminate nodules, 550 returned.) Our compliance rate for annual low-dose CT scans was 91% for the period August 2006 through December 2008 (1635 baselines performed, 1490 returned, to date, for the annual CT).

How Eligible Participants Can Enroll

As noted in earlier issues of the WHPP HealthWatch, lung cancer remains the leading cause of cancer death for both men and women, in part because more than 85% of new cases are detected when symptoms appear. By the time symptoms appear, the lung cancer is more likely to have spread to the lymph nodes or other organs. With early detection, five-year survival, and possibly long-term mortality, is greatly improved.

If you work/worked at any of the selected sites mentioned above and are interested, please call to see if you are eligible to participate in the WHPP Early Lung Cancer Detection Program, 1-866-228-7226. Previous GDP Program participants can re-enroll, however, priority will be given to those who have never been scanned.

Letter to WHPP Project Director Dr. Markowitz from Y-12 Early Lung Cancer Detection (ELCD) Program Participant

I enrolled in the low-dose CT scanning program at Oak Ridge, TN in the spring of 2007. This screening program is sponsored jointly by the Atomic Trades and Labor Council of the Oak Ridge plants and Queens College of the City University of New York.

The Queens College radiologist was watching one spot closely. I was asked to come back for a six month follow-up. At six months, the radiologist was still concerned and recommended that I come back one more time in another three months. When I returned in January 2008, the low-dose CT scan showed that the spot in my lung that we were following had again grown slightly. This time, I was advised to investigate further locally. I did and the local pulmonary physicians were able to determine that the spot that appeared larger on the January 2008 scan did, indeed, have all the characteristics of a malignancy. My local doctors performed a PET scan the next month and a biopsy in early February. All confirmed what was suspected all along – the spot was lung cancer.

The tumor was removed on March 19, 2008 and proved to be a very small growth, approximately 2 cm in size. All the concerned surgeons agreed that this was about as small as they can be and still be detected. My tumor was described as Stage 1A, the earliest stage of lung cancer; it was “clean” all around and required no further follow-up treatment. Before the surgery, I had no symptoms; the small tumor had not caused me personal discomfort of any kind. Without the low-dose CT scan program, I would not have known I had lung cancer until it was at a later stage when treatment is much less likely to help.

I must conclude that your lung cancer screening program, and all those who worked so diligently to carry out this program, have collectively “saved my life.” For this I am, and will be eternally grateful.

Thank you all. I shall never forget what a wonderful group you have all been to me.

Ralph Dial, Former ORNL worker

“I am astounded by the professional, caring, personalized, understanding, effective attention I received. Hippocrates would be proud – the best staff at all levels in my 73 years of experience (including Harvard Medical School, NIH, Mayo Clinic, and Cleveland Clinic.) You are simply the best in every respect.”

Former Y-12 worker and WHPP Early Lung Cancer Detection Program participant, Edwin H. Krieg
Kettering Workers’ Care Clinics: A Focus on Excellence for Mound Workers

Kettering Workers’ Care is proud to be partnered with the United Steelworkers and Queens College in providing medical screening for the Department of Energy nuclear workers from the former Mound site in Miamisburg, Ohio. As of February 2009, 938 Mound workers have been screened at Kettering Workers’ Care in Dayton and Franklin, Ohio. The medical professionals who work at our locations (including one in Huber Heights, Ohio) know the important role that a high quality medical screening examination plays in ensuring the astute health care professionals at both Kettering Workers’ Care and Queens College.

The health care providers at Kettering Workers’ Care spend one to two hours with each former Mound worker taking them through the battery of tests that is specified in the DOE national screening protocol. The screening examination is primarily focused on looking for select diseases related to exposures at work. However, the Kettering doctors also counsel and educate former Mound workers on a variety of general health and wellness issues that may come up during their exam such as high cholesterol, diabetes, and high blood pressure.

Guide to EEOICPA: Understanding the Federal Compensation Program for Energy Workers

It is no small wonder that workers might become confused by the law when so many different organizations are involved in the Energy Employees Occupational Illness Compensation Program (EEOICP), either directly or peripherally. The chart to the right clarifies the roles of the six agencies, boards or organizations that have some relationship with the claims process. At a glance, the main responsibilities of these six bodies can be described as follows:

(1) The Department of Labor (DOL) is the arbiter of compensation claims, deciding whether or not a claim is awarded.

(2) The National Institute for Occupational Safety and Health (NIOSH) also plays a role in the decision-making for claims, conducting dose reconstructions for Part B claims, determining if Part B cancers are “at least as likely as not” to be related to radiation and reviewing Special Exposure Cohort (SEC) petitions. SEC refers to EEOICPA’s provision for select groups of DOE workers to request a presumption of work-relatedness to their radiation cancers because exposure records are not available for dose reconstruction.

(3) The Radiation and Health Advisory Board reviews SEC petitions and reviews NIOSH site profiles. Site profiles contain historical process information and are used to evaluate EEOICPA claims.

(4) DOE provides exposure records to NIOSH and employment verification and work history to DOL.

(5) The EEOICP Resource Centers are a point of contact for prospective claimants to get information about the claims process and to get help in completing the necessary forms.

(6) The Worker Health Protection Program (WHPP) medical screening office provides physical examinations and sends results letters that specify if select illnesses detected may be related to work.
John Steward, WHPP K-25 Coordinator Visits WHPP Participants in Need --Wherever People Gather

John Steward has worked as a local Worker Health Protection Program (WHPP) coordinator for K-25 Gaseous Diffusion Plant workers for four years, along with two other veteran WHPP Ground Team members, Tom Moser and Bruce Lawson. Though his WHPP duties are based at the union hall office, John spends most of his time in the field, working one-on-one with program participants.

Among John’s many local contacts are nurses at assisted living centers and nursing homes who help him find former K-25 workers who have not yet participated in the medical surveillance program. With his 40 years at K-25 behind him, John is well-prepared to help potential participants at these senior facilities complete the paperwork that must be filled out prior to getting the WHPP physical, including a comprehensive job history of positions held at K-25 and other DOE facilities.

Out in the field, John has also successfully guided many WHPP participants and family members through the sometimes complicated Energy Employees Occupational Illness Compensation Program Act (EEOICPA) claims process; he has helped with Part B (radiation-related cancer) and Part E (toxic substance) claims.

More than 2,500 people from the Oak Ridge area benefit from John Steward’s efforts each year by attending the Bechtel Jacobs sponsored community health fair that John organizes. He started the Safety and Health Day 12 years ago with a budget of $200; the budget is much higher now. At the fair, information is provided about the benefits of the WHPP medical surveillance program, EEOICPA and other general health issues for former and current energy workers.

“I am grateful to WHPP for the opportunity to help others”.

– John Steward, K-25 “Ground Team” member

Currently, John Steward serves as a full-time USW Health and Safety Representative at K-25 Bechtel Jacobs. Prior to taking this full-time position in 1997, John had worked in the same position but on a part-time basis, beginning in 1993. He is also the Vice President of the Atomic Energy Workers Council for the United Steelworkers (USW). The Council is a forum for atomic energy site local unions to discuss and compare environmental management cleanup efforts.

Agencies, Boards, and Programs Involved in EEOICPA

<table>
<thead>
<tr>
<th>DEPARTMENT OF LABOR (DOL)</th>
<th>NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH)</th>
<th>ADVISORY BOARD ON RADIATION AND HEALTH</th>
<th>WORKER HEALTH PROGRAM (WHPP) MEDICAL SCREENING PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Processes Part B and E claims</td>
<td>• Does dose reconstruction for Part B claims</td>
<td>• Reviews procedures used in the dose reconstruction process</td>
<td>• Provides medical screening at no cost to DOE workers from selected sites</td>
</tr>
<tr>
<td>• Decides whether Part B and E claims are awarded</td>
<td>• Determines if cancers are “at least as likely as not” to be related to radiation</td>
<td>• Audits 2.5% of NIOSH dose reconstructions</td>
<td>• Send results letters that specify if illnesses detected may be related to work</td>
</tr>
<tr>
<td><strong>EEOICP Resource Centers</strong></td>
<td>• Gives its determination to DOL for decisions on claims</td>
<td>• Reviews SEC petitions and makes recommendations to Secretary of Health &amp; Human Services</td>
<td>• Provide links to resources on workers’ compensation</td>
</tr>
<tr>
<td>• Provide information about the claims process to claimants</td>
<td>• Reviews SEC petitions and recommends to HHS if classes of workers should be given SEC status</td>
<td>• Reviews site profiles that contain historical process information and are used to evaluate EEOICPA claims</td>
<td></td>
</tr>
</tbody>
</table>
**The Art of Wellness – A Blend of Physical, Mental and Spiritual Health**

**Introduction**
Physical wellness involves avoiding harmful habits and taking actions that bring you towards a higher level of health. Optimal well-being, however, is more than just physical wellness; it includes finding a balance of mind, body, and spirit.

**Physical Wellness**
Physical wellness involves the understanding that eating well, exercising, and healthy lifestyle choices are important, and that these choices will affect how long you live, and more importantly, how well you live.

A definition of physical wellness would include the items on the following list, which you can use as a barometer of your wellness quotient.

1. Develop an individual fitness plan of regular physical activity to improve cardiovascular capacity, strength and flexibility.
2. Eat a healthy, nutritious and varied diet.
3. Get the amount of sleep and rest that your body needs.
4. Practice preventive health by getting regular check ups and recommended health screenings, such as colonoscopy, mammograms etc., and avoiding tobacco, drugs, and excessive alcohol consumption.
5. Respect your body’s own limitations.

How well did you do on the five points listed? You can use this as a guide to follow and chart your progress in building up your physical wellness.

**A Few Minutes a Day for Physical Wellness**
If you only have a few minutes today to take a step towards physical wellness, take these steps:

- **Drink water.** Eight glasses a day are recommended but any amount is better than none. Fill a bottle with water and keep it with you wherever you go! Drink water at your desk, watching TV, or anywhere you happen to be.
- **Eat at least one piece of fruit or a vegetable with every meal.** Making a healthy choice at even one meal a day can mean great benefit for overall physical wellness. Fresh fruits and vegetables are quick and easy physical wellness at your fingertips.
- **Stretch.** Learn some simple stretches and devise a five-minute routine. A five-minute routine will act as a great break from stresses of the day. When you become comfortable with this routine, think about learning a few yoga stretches. The deep breathing and poses aid relaxation and muscle building.

**Emotional Wellness**
Emotional wellness is the overall comfort with and acceptance of one’s full range of feelings, with the goal of minimizing the negative feelings and maximizing positive emotions such as amusement, excitement, contentment and love which contribute to our overall sense of well-being.

Emotional wellness is the overall comfort with and acceptance of one’s full range of feelings, with the goal of minimizing the negative feelings and maximizing positive emotions such as amusement, excitement, contentment and love which contribute to our overall sense of well-being.

- **Call a friend.** If you’re having a bad day, just call someone and let them know what’s going on. That simple call often alleviates the problem just by knowing you are not alone.
- **Read an article** on wellness topics such as anger management, stress reduction, or defeating depression. Learning more about emotional wellness is key to emotional health.
- **Write a journal.** Just write a few notes about what is going on in your life. It may not seem like much, but you can use the notes later for insight and better perspective.
- **Read something inspirational.** When you need a spiritual lift, read something inspirational that connects you to your personal belief system and sense of purpose in life.

**Spiritual Wellness**
The Dalai Lama, the great spiritual leader of Tibetan Buddhism, said that “my religion is kindness” and almost everyone could agree with the importance of kindness and compassion toward others as essential to meaning, purpose, and happiness in life.

It’s important for everyone to explore what they believe is their own sense of meaning and purpose. The path to spiritual wellness may involve prayer, meditation, affirmations, or specific spiritual practices that support your connection to your personal belief system or to a “higher power”.

Comprehensive wellness programs are a natural accompaniment to the WHPP program and participation in WHPP can be a “first step” to your new (or improved) wellness plan. While the primary purpose of the Worker Health Protection Program (WHPP) is to detect work-related illness, the physical exam (and the “rescreen physical” done three years later) include many components related to overall wellness and preventive health. For example, cholesterol, sugar levels, and blood pressure are checked. The blood hemoccult test is performed to screen for early colon cancer, and the WHPP Early Lung Cancer Detection Program, available to certain workers, supplements this with a scan of the lungs to detect early signs of lung cancer.

**A Few Minutes a Day for Spiritual Wellness**
- **Meditate.** Don’t be intimidated by this word. Meditation can be done in many ways but, simply put, it means to focus on something -- whether it is your own breath or a pleasant sound -- to free your mind from stressful thoughts. If you meditate for five minutes to quiet your mind, reconnect with your heart, breathing deeply, you will naturally relax.
- **Read Something Inspirational.** When you need a spiritual lift, read something inspirational that connects you to your personal belief system and sense of purpose in life.

**Sources:**
1. Developing a Wellness Plan for Exercise – Insight Journal, 6-8-2007
2. Definition of Physical Wellness – Wholeness Blog
NIOSH Completes Study on Leukemia Risk in Energy Workers

A total of 94,517 workers at five U.S. nuclear facilities (including WHPP ORNL site) were monitored for radiation exposure between the 1940’s and 1990’s. The National Institute for Occupational Safety and Health (NIOSH), the federal research agency that works to improve the health and safety of workers, examined death certificates and found that 257 of these workers died from a type of leukemia.

Why Study Was the Done?

Previous studies of workers and atomic bomb survivors have shown that exposure to high doses of ionizing radiation causes leukemia. However, it is still not certain if low doses of ionizing radiation, which are common in some workplaces, may also cause leukemia. In this study, NIOSH looks at low doses of ionizing radiation in a group of nuclear workers to see if exposure to low doses of ionizing radiation in the workplace is linked to fatal leukemia.

Leukemia is a type of cancer, an illness that starts in blood-forming tissue such as bone marrow. Leukemia causes large numbers of abnormal blood cells to be produced. The cancer cells or abnormal cells interfere with the body’s production of healthy cells, which makes the body unable to fight off infections. Leukemia is either chronic (slowly progressing) or acute (rapidly progressing).

There are many types of leukemia. The four main types are: acute lymphocytic leukemia; acute myeloid leukemia; chronic lymphocytic leukemia and chronic leukemia.

Which Energy Workers were Included in the Study?
The following five U.S. nuclear facilities were involved in the study: Hanford Site; Los Alamos National Laboratory; Oak Ridge National Laboratory (ORNL); Portsmouth Naval Shipyard and Savannah River Site.

How was the Study Done?

Using information and records gathered from the study sites, researchers estimated radiation doses for the 249 workers who died from leukemia and also for the comparison group of 995 workers who did not die from leukemia. Notes were made of whether any of these workers smoked or were exposed to other possible cancer-causing agents at work including benzene and carbon tetrachloride.

By comparing the radiation doses of the workers who died of leukemia to the radiation doses of the comparison group, the researchers were able to examine the possible link between fatal leukemia and the amount of radiation exposure in the workplace, the “dose-response” relationship.

What Did the NIOSH Leukemia Study Find?

After accounting for age, gender and benzene exposure, NIOSH found the relative risk of death from all types of leukemia (excluding chronic lymphocytic leukemia) was 45% higher in workers exposed to more than one rem of radiation while working at the selected DOE facilities, compared to those exposed to less than one rem.

According to Dr. Schubauer-Berigan the first author of the publications upon which the NIOSH Announcement of Findings was based, this increase was statistically significant. However, it is important to keep in mind that the mean lifetime dose among the group that was exposed to greater than 1 rem was 5.9 rem.

(continued on page 8)
the size of it was such that the risk of death outweighed the risk of surgery. According to Poole, that's why he had an operation within a matter of days and probably why he's living today. "I was a walking time bomb," Poole said. "Had I not come over here for that scan, I might not be sitting here now. I recommend it to everybody I run into, whether they're working or not."

Pat Davis, 55, worked as a welder and weld inspector at Y-12. In June 2007, he had his yearly physical and "everything came back fine." Nonetheless, because he'd been exposed to all sorts of materials over the years, he decided to take advantage of the chest scan being offered through the ATLC. "It was free, and I didn't really expect to find anything," Davis said. Soon afterward, however, he got a packet in the mail, telling him to contact his doctor immediately. "They found a mass on my thyroid," which was confirmed as cancer by other tests, he said.

Ed Mee is hoping that the Munger article will motivate former hourly and salaried workers to get both the WHPP physical and, after that, if eligible, the low-dose CT scan. Hourly and salaried current workers are not entitled to the WHPP physical but may be eligible for the low-dose CT scan. Interested former ORNL and Y-12 workers should first call the ATLC union hall to set up an appointment for a physical (toll-free: 1-800-906-2019) and current workers should call Queens College to see whether they meet the criteria for the low-dose CT scan (toll-free: 1-866-228-7226).

Among the many who are not aware of the WHPP medical screening program are salaried workers. Because of the union involvement in the program, many salaried employees at ORNL and Y-12 do not realize that the program is also available to them. Recent ATLC outreach efforts are working on getting the word out to the thousands of salaried workers who might be eligible.

Program Gets A Boost from Local Newspaper Story

Bill Assures Funding for Former Worker Program and Early Lung Cancer Detection

NIOSH Completes Study on Leukemia Risk in Energy Workers

What you should do?

Average radiation exposures are generally lower in workers today compared to 40 years ago because of improved technology and changes in work practices. If you currently work with radioactive materials or non-radioactive hazardous materials, contact your health and safety representative with any questions about your exposures or how to best protect yourself.

Garry Whitley told WHPP HealthWatch editors, "The results of the NIOSH study will help persuade both management and workers that minimizing radiation exposures must continue to be a priority at ORNL and other DOE facilities. And workers with past exposures need to be vigilant about their health to ensure early detection of radiation-related problems."

Jeff Hill, ATLC health and safety representative at ORNL added, "This study will be a great tool for reminding current workers that radiation exposures still need to be a concern today."

NIOSH Completes Study on Leukemia Risk in Energy Workers

(continued from page 2)

(continued from page 1)

(continued from page 7)

(continued from page 7)