

Air Force Research Laboratory
Wright-Patterson AFB, Ohio



Environmental, Safety and Occupational Health Newsletter

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Lockout/Tagout Mandatory at AFRL

Lockout/Tagout (LOTO) has been getting a lot of attention lately here at Wright-Patterson AFB. Knowing the purpose, requirements, and proper procedures to LOTO could very well mean the difference between life and death. A serious injury recently occurred on Base as a result of inadequate LOTO procedures and underscores the importance of respecting LOTO.



An AFRL ESOH team developed **AFRLI 91-501, Laboratory Lock-Out/Tag-Out Safety Program** https://afrl.af.mil/RESOURCES/Library/afri_all/pubs/default.asp which was published as final by HQ AFRL on 3 Mar 03. The mandatory instruction outlines requirements for LOTO at AFRL in order to ensure compliance with AFOSH Std 91-501 and OSHA 29 CFR 1910.127. Contractors are also required to have a LOTO program and must communicate their program to government employees and visa versa.

LO/TO is a program designed to prevent the accidental release of stored energy (hydraulic, pneumatic, thermal, mechanical, electrical, etc.) during periods of servicing or maintenance. **Lockout**, as defined by the Occupational Safety and Health Administration (OSHA), is “the placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed”. **Tagout** is defined by OSHA as “the placement of a tagout device, in accordance with an established procedure to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device has been removed”.

Lockout is the preferred method to isolate energy. Tags should only be used when using a lock is not an option due to the way the isolating device is made. If tags are used, they must be durable enough to withstand the environment they are placed in, must be uniform throughout the facility, and must be legible and filled out completely.

When using lockout procedures to isolate an energy source, always remember the “**one lock-one key**” concept. The only person that should have a key to the lock is the person that installed the lock. This is the only way to ensure that the lock will not be unknowingly removed by anyone other than the person working on the equipment.

If you know nothing else about LOTO, just remember this: **never remove a tag or lock or attempt to operate any equipment that has a tag or lock on it without checking with the person who installed the device or your supervisor.** Know your unit's LO/TO procedures and follow them. The life you save may be your own.

LOTO training is available for interested AFRL employees. Contact Mary Shelly at 255-9000 or your safety officer for more information.

Please visit the following web sites for more information about LOTO:

OSHA website: http://www.osha-slc.gov/OshStd_data/1910_0147.html.

Air Force Occupational Safety and Health Standard 91-501 Chapter 21:
<http://www.e-publishing.af.mil/search.asp?keyword=91-501&Go.x=18&Go.y=12>

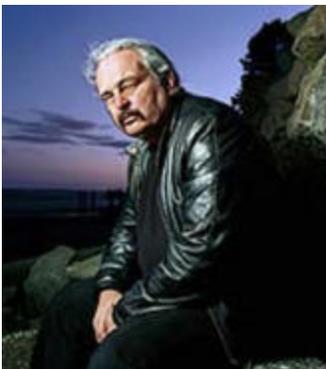
If you have any further questions please contact your Unit Safety Representative or the Base Safety Office at 43391



Wood Worries

Ron Mattus
Gainesville Sun

Rick Feutz still remembers how the sawdust caked his body. The Seattle science teacher was building a wooden float for his children. The experience would change his life.



Rick Feutz shown here on the beach near his Poulsbo, Wash., home, suffers some facial paralysis and lack of strength in his fingers because of a reaction to working with treated wood in 1986

For more than a week, Feutz cut pressure-treated wood with a power saw. After a few days, he felt like he was getting the flu. After a few more days, he collapsed while pushing a wheelbarrow. For a year, Feutz couldn't walk without a walker and was so disoriented in the dark he had to crawl.

Fifteen years later, the former Washington Teacher of the Year still suffers from weakness, memory loss and partial paralysis in his face - lingering effects from what doctors said was severe arsenic poisoning.

The arsenic was in the wood. Pressure-treated lumber contains a potent chemical called CCA, which stands for chromium, copper and arsenic. Chromium and arsenic are heavy metals known to cause cancer. They are also among the most toxic substances for people and animals. Most people who buy the wood don't know that. Thousands use it every day, to build billions of board feet of decks, fences, porches and picnic tables. The chemical wards off insects and prevents fungus. Most consumers don't get a warning about it.

In recent weeks, statewide media attention has focused on the use of CCA-treated wood at playgrounds. Arsenic in the wood is leaching into the soil, and authorities are fencing off playgrounds until they figure out whether the levels are safe. Last week, workers began removing playground equipment at the Baby Gator child care center on the University of Florida campus. With kids, the wood is just too risky, university health officials said.

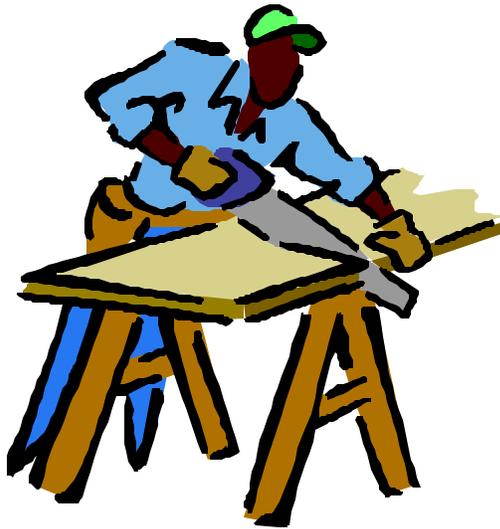
But as Feutz's case makes clear, the wood can be riskier for people who work with it. "When I think of it now, I think of that fine sawdust all over my body, brushing it off," said Feutz, now 53 and an executive for a company that makes computer keyboards. "I didn't think anything of it."

And why would he? Like most people, Feutz didn't know the wood was filled with pesticide. He didn't know he was supposed to wear a dust mask when he sawed

it. He never got the warning sheet the industry promised it would give to consumers.

He didn't know a single board contains enough arsenic to kill 80 people or make hundreds very sick. He didn't know sawdust could hurt so badly. Feutz might not be the only one who found out too late.

Thanks to Debra Charles, 37 TRW/SEG for forwarding this article.





If You Love Salmon This Will Scare You

Packed with omega-3 fatty acids, salmon is one of the healthiest foods you can eat. Or is it? The Environmental Working Group has issued a scary report indicating that farm-raised salmon--but not the kind that is fished out of streams and rivers--is contaminated with high levels of cancer-causing chemicals called polychlorinated biphenyls, more commonly known as PCBs, report Reuters and The New York Times.

EWG purchased and tested salmon filets from 10 different grocery stores in Washington, D.C., San Francisco, and Portland, Oregon. Seven of the 10 filets contained high levels of PCBs. "These first-ever tests of farmed salmon from U.S. grocery stores show that farmed salmon are likely the most PCB-contaminated protein source in the U.S. food supply," the non-profit environmental investigative group said in a prepared statement.

We eat a lot of salmon. About one-quarter of all adult Americans--that would be 52 million people--eat salmon and about 23 million of those eat it more than once a month. "Based on these data we estimate that 800,000 people face an excess lifetime cancer risk...from eating farmed salmon."

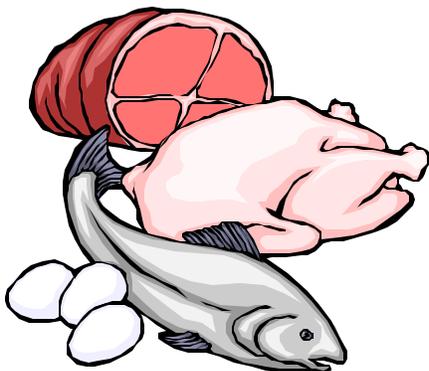
EWG found that farmed salmon had 16 times the PCBs found in wild salmon, four times the levels in beef, and 3.4 times the levels found in other seafood. The New York Times notes that while the PCB levels in salmon are high, they do not exceed those set in 1984 by the FDA for commercially sold fish; however, they do exceed the guidelines set by the Environmental Protection Agency in 1999 for recreationally caught fish. Although this study by EWG has not been published in a peer-reviewed journal, the findings are supported by other studies done in Canada, Ireland, and Britain--all of which has forced the hand of the U.S. Food and Drug Administration, which will now review the problem.

What are PCBs? They come from hydraulic fluids and oils, electrical capacitors, and transformers. They are carcinogenic because they are endocrine disrupters, which are chemicals that mimic hormones. PCBs can also cause infertility and other sexual changes. Because of this, PCBs have been banned in the United States since 1976 except when they are used in completely enclosed areas. Still, they persist in the environment and animal fat. Farmed salmon are raised in high-density fish pens in what may be a pristine environment, but they are fed fishmeal from around the world. And that fishmeal is contaminated with PCBs. While the omega-3 fatty acids in salmon are healthy for us, they also provide a place for the PCBs to build up.

What do the salmon farmers think of all this? An organization called Salmon of the Americas represents 80 salmon farmers in the United States, Canada, and Chile. Its spokesman says that until the farmers hear differently, they'll continue to follow the FDA regulations, rather than the more strict EPA regulations. "We assume they know what they are doing, and the regulations and levels they have promulgated mean that the food, including farmed salmon, is safe, wholesome, and nutritious. EPA and FDA should work their differences out," Alex Trent, acting director of Salmon of the Americas told the Times. "When and if the FDA changes its limits, we will be the first to comply. Someone is yelling fire in a theater to help make their point, and they haven't proven this point to the FDA yet. If they had, they would change their standards."

Based on the results of this study and EPA recommendations, the New York Times advises consumers to eat farmed salmon no more than once a month.

<http://channels.netscape.com/ns/homerealestate/package.jsp?name=fte/salmon/salmon>



Q: Do protein diets really work?

A: Protein diets have been very controversial. The Atkins diet, the Zone, Protein Power, Sugar Busters and the Stillman diet count on low carbohydrates and high protein. Most people agree that you will lose weight and may even lower your cholesterol -- at least initially.

The problem may lie down the road when your weight stabilizes. At that time, the bad type of cholesterol may become elevated, despite the lower weight.

Many of the ideas behind the diets were once considered far-fetched, but are now held as more mainstream. However, with this diet, as with other types of diets, many people find them hard to stick with and find the weight returns when the diet ends.

There are no quick, easy ways to lose weight without first trying to be as healthy as possible. The American Dietary Association still recommends balanced meals and regular exercise.

Q: Do supplements with promises of burning fat and increasing energy really work? Can they be dangerous to your health?

A: There is little scientific proof that these fat-burning, energy-increasing pills really work.

Fat-burning pills are generally some combination of herb-based stimulants, and they are supposed to increase energy while stimulating fat burning. Most experts agree there is barely enough evidence that these products have a minor effect, but only when combined with proper diet and regular exercise.

Some ingredients can pose dangers to your health. For example, ephedra can raise blood pressure and even cause heart attacks, arrhythmia or strokes. While these pills can work by increasing your metabolic rate, the same effect can be reached more safely and cheaply simply by exercising more and eating less.

Q's and A's taken from CNN.com/Health with Dr. Sanjay Gupta, available:

<http://channels.netscape.com/ns/wrap/linker.jsp?url=http://www.cnn.com/2002/HEALTH/11/26/yh.ask.protein.diets.supplements/index.html>



The WPAFB Health and Wellness Center offers a variety of classes and activities to help encourage a healthier lifestyle. They are open to active duty and retired military and

their dependents (age 18 and older), and civilian DoD employees. Contract employees may attend on a space-available basis. The HAWC encompasses the following principles of health promotion: Nutrition, Exercise, Stress Reduction, and Tobacco Cessation.

Call 904-WELL (9355) to get the latest schedule of classes or to sign up. Class sizes are limited. All classes require pre-registration but are free. Classes will be held at Hangar 22 (Bldg 571) Area B - Wright Field Fitness Center. Many briefings can be individualized and brought to your organization.

ESOH Training and Opportunities

WPAFB ESOH WEBSITES:

ENVIRONMENTAL MANAGEMENT: <http://www.abwem.wpafb.af.mil/em/>

SAFETY: <https://www.asc.wpafb.af.mil/asc/safety/index.html>

PUBLIC HEALTH: <https://wpmc3.wpafb.af.mil/amds/ph/index.htm>

BIOENVIRONMENTAL ENGINEERING: <https://www.bio.wpafb.af.mil/>

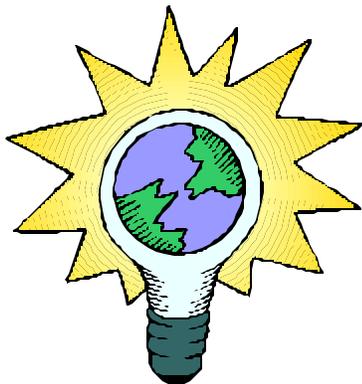
HEALTH AND WELLNESS CENTER (HAWC):

<http://wpmc1.wpafb.af.mil/pages/hawc/>

CAP OFFICE: <https://www.afmc-mil.wpafb.af.mil/ESC/MM/CAP/>

The Office of Environmental Management
(88 ABW/EM) has changed their phone numbers. For a complete listing, please see their website:

https://wrigem.wpafb.af.mil/EM/staff/index.cfm?fuseaction=main&obj_id=93



Do you have an idea that might help reduce environmental impact or waste generation on WPAFB? 88 ABW/EM is looking for good Pollution Prevention projects and can even provide funding to help study and implement such initiatives. For more information, contact Chris Tumbusch at 74857.





RCRA Hazardous Waste Training: Mandatory for all employees who generate hazardous waste. Issue Point (IP) Managers, Hazwaste generators, primary and alternate Initial Accumulation Point (IAP) managers, Unit Environmental Coordinators (UECs), and supervisors of all these individuals must take annual RCRA training.

PLEASE SCHEDULE ALL RCRA HAZARDOUS WASTE TRAINING with Susan Dilworth at 77454 or [CLICK HERE to schedule electronically](#)

Initial Training: 20 Nov 03

Annual Refresher Training - AFRL Only
13 Nov 03

Annual Refresher Training - Organizations other than AFRL
16 Oct, 18 Dec 03

Environmental Compliance, Assessment and Management Program (ECAMP) Training (ENV220)



This course is designed to give students knowledge to successfully plan and execute an internal or external compliance assessment (such as ECAMP), prepare required reports, and direct the follow-up actions. For more information on the course see AFIT's website. <http://cess.afit.af.mil/>

You must sign up for the course through your Training Focal Point (TFP). Contractor registration should be coordinated through their assigned organization's TFP. Additional paperwork is required for contractors to attend this course.

For more information contact Karen Thompson, 88 ABW/EMO at 75899

Environmental, Safety and Occupational Health (ESOH) Awareness Training



22 Oct 03

Sign up with 88 ABW/ EM, Treva Bashore, 76391

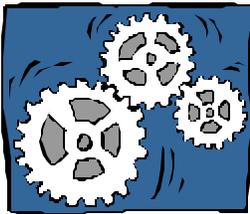
This course covers a broad range of topics and requirements that apply to all of us at Wright-Patterson, including mandatory training requirements. This course is highly recommended for all employees on Base, including contractors. Supervisors are highly encouraged to attend.



CPR Training

Required for electrical and confined space workers per 29 CFR 1910.151. The American Heart Association recommends CPR refresher training every two years and the American Red Cross recommends CPR refresher training every year. CPR training (per the American Heart Association) is **taught at the Base Hospital every Tuesday** provided that there are enough students.

Contact Marcia Wilson at 79347 or Karen Turner 48384 (Bldg 675 Area B)



Operational Risk Management (ORM)

To sign up, contact Chuck Swankhaus at 43390

ORM is a tool anyone can use to help with planning and decision-making in order to reduce or eliminate potential risks and increase efficiency. The Safety Office (ASC/SEG) has made two ORM briefings available over the Internet. Click on the following links to

learn more about ORM:

Awareness Level ORM Training:

https://www.asc.wpafb.af.mil/asc/safety/orm/exec_training.ppt

Level II ORM Training:

https://www.asc.wpafb.af.mil/asc/safety/orm/orm_level_ii_training.ppt

Public Health Training for 2003

All Training will be held at 1400 in the Public Health Classroom in building 675, located in Area B. If needed, more classes will be added to the schedule. To sign up for training or work specific education, please contact Public Health at 255-2515.



Hazardous Communication (HAZCOM)

24 Oct 03

This course is a Train-the-Trainer course that provides mandatory HAZCOM training to supervisors and safety reps responsible for their organization's HAZCOM program. Must have previously had general Hazcom.

Hazcom training per 29 CFR 1910.1200 is required for all employees who use, handle, or may be exposed to hazardous materials upon initial assignment to that job (if

not already receiving Chemical Hygiene Training per 29 CFR 1910.1450). HAZCOM refresher training is required whenever a new chemical or hazardous process is introduced into the work area or it is evident an employee needs refresher training. Otherwise, there is no “annual” requirement for HAZCOM training.

Ergonomics Training
21 Nov 03

Open to all interested DOD and military workers. Focus will be on Repetitive Motion Illnesses. If you would like in-depth ergonomic training that is more job specific, Public Health is available to do that on a one-to-one basis.



Reproductive Hazards in the Workplace
7 Nov 03

Open to workplace supervisors, safety reps, and any interested Base personnel.

Laser Hazards
12 Dec 03

Open to workplace supervisors or Safety Reps.

Asbestos Awareness
5 Dec 03

Mandatory for all building managers and CE personnel.

Hearing Conservation (General)
14 Nov 03

Open to all base employees, recommended for all employees routinely exposed to noise.

OTHER PUBLIC HEALTH TRAINING AVAILABLE UPON REQUEST

Cadmium
Cold Stress
Lead
Respiratory Protection
Formaldehyde

Carbon monoxide
Heat Stress
Personal Protective Equipment
Benzene
Universal Precautions/
Bloodborne Pathogens



If you have any suggestions for this newsletter or if you would like to be added / removed from the distribution list, please contact [Mary Shelly](#) via email or at 59000.