

Air Force Research Laboratory
Wright-Patterson AFB Ohio

Environmental, Safety, and Occupational Health Newsletter

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Are You a Shipper of Hazardous Materials?

If you send hazardous materials (HAZMAT) off Base and are not trained, or you improperly label, package, or offer a HAZMAT for shipment off Base, you are putting yourself and the Air Force in a liable position.

The following examples are just a few of the many violations of Department of Transportation (DOT) regulations that occur every day across the country. Note how even seemingly negligible amounts of hazardous materials, when improperly shipped, can quickly add up to very costly fines.

Please ship this laboratory chemical to my contractor in California. I think it might be corrosive...will that be a problem?



From Environmental Resource Center's "Tip of the Week" newsletter:

 **FAA Proposes Penalties Against Weston, Xerox, and FedEx for HAZMAT Violations:** The Federal Aviation Administration, Southern Region, has proposed to assess a **\$80,000** civil penalty against Roy F. Weston, Inc., of Edison, NJ and West Chester, Penn., for allegedly violating Department of Transportation hazardous materials regulations. FAA alleges that Weston **improperly shipped a fiberboard box containing a portable generator, containing approximately a half-gallon of gasoline, on a FedEx cargo flight. The generator and gasoline, a flammable liquid, are classified as hazardous materials.** Ground handling employees at the FedEx sort facility in Memphis, TN discovered the shipment leaking fuel and emitting a strong odor.

 A **\$72,000** civil penalty has also been proposed against Xerox Corp., of Des Plaines, Ill., for allegedly **improperly shipping a padded envelope containing one eight-ounce plastic bottle of Xerox Film Remover, a flammable liquid, on a United Parcel Service cargo flight.** Ground handling employees at the UPS sort facility in Louisville, KY discovered the shipment during a document search.

 A **\$54,000** civil penalty has been proposed against Midwest Sign & Screen Printing Supply Co., Inc., of St. Paul, MN for allegedly **improperly shipping a fiberboard box containing a one-gallon can of printing ink, a flammable liquid, on a United Parcel Service cargo flight.** Ground handling employees at the UPS sort facility in Louisville, KY discovered the shipment leaking.

(...and don't feel too confident when you say, "I use Fed Ex. They take care of everything for me so I don't have to worry about all that HAZMAT and DOT stuff!"...)

 A **\$165,000** civil penalty has been proposed against Federal Express Corp., of Memphis, TN for allegedly violating Department of Transportation hazardous materials regulations. FAA alleges that the FedEx improperly shipped a **fiberboard box containing a chemical oxygen generator on a FedEx cargo flight from Los Angeles to the company's package sorting facility in Memphis where employees discovered the shipment.**



In **ALL** these cases, the companies offered the hazardous material for transportation when it was:

- ***Not packaged, labeled, marked, classed, described, documented, or in condition for shipment*** as required by regulations;
- The companies also ***failed to ensure employees were trained*** to properly package and handle hazardous materials, and
- ***Did not make available*** at all times the required ***emergency response information***.

Fortunately in all these cases, nobody was hurt and the violations only resulted in fines, costly though they were. Improper packaging and shipment of hazardous materials also causes environmental spills, fires, explosions, and human life.

DEFINITION OF A HAZMAT EMPLOYEE

If you aren't sure if or how any of this applies to you, find out if you are a "HAZMAT EMPLOYEE" according to the Department of Transportation (DOT) regulations [and my green notes inserted in the brackets]:

The definition of a HAZMAT Employee per 49 CFR 178.1 reads, "...a person who is employed by a HAZMAT employer [yep, Wright-Patterson is one!] and who in the course of employment directly affects hazardous materials transportation safety.

This term includes an owner-operator of a motor vehicle, which transports hazardous materials in commerce [gov't employees are not in commerce, but contractors - you are since you are paid for the services you provide to the Air Force]. This term includes an individual, including a self-employed individual, employed by a HAZMAT employer who, during the course of employment:



- 1) Loads, unloads, or handles hazardous materials [do you take HAZMAT OFF, prepare it FOR, or put it ON a vehicle for transportation off base? If so, this means YOU];
- 2) Manufactures, tests, reconditions, repairs, modifies, marks, or **otherwise represents containers, drums, or packagings as qualified for use in the transportation of hazardous materials** [if you package a HAZMAT and send it via FedEx, UPS, or any other means off WPAFB, this means YOU];
- 3) Prepares hazardous materials for transportation [if you put HAZMAT in a container and label it for shipping off base, this means YOU – see **NOTE** below];

4) Is responsible for safety of transporting hazardous materials; or

5) Operates a vehicle used to transport hazardous materials [this does NOT include operating vehicles solely on WPAFB].”

(**NOTE:** Hazardous waste DOES qualify as a hazardous material according to DOT. However, if you generate hazardous waste that gets picked up by our Hazwaste contractor, your waste is transported to a 90-day storage site where it is consolidated with compatible waste, lab-packed, or in some other way repackaged and properly labeled prior to being shipped off WPAFB. Therefore, you do not fall under one of the categories above. If you have any questions concerning this, contact [Mary Shelly](#) at x59000 or Environmental Management at 77152.)

If you find yourself fitting into any of these five categories, you need DOT training as outlined in 49 CFR section 172.704 to be qualified to ship HAZMAT. Two DOT courses, a one-week initial training course and a one-day refresher training course were offered in August and fifty people attended. To sign up for the next available Department of Transportation Training, contact [Mary Shelly](#) at x59000.

HOW DO YOU SHIP HAZMAT IF YOU HAVE NOT HAD DOT TRAINING?

You can either find someone in your organization who has had DOT training within the last three years and see if they will ship the hazmat for you. Contact your Unit Environmental Coordinator for assistance in identifying a DOT-trained employee in your organization. **Otherwise, you must ship the HAZMAT off base via the Freight Terminal, Bldg 143 in Area C.** Here is what is required:

- MSDS for product being shipped (or if a laboratory sample, some means to verify hazardous constituents of material for proper DOT coding.)
- AF Form 1149 for billing.
- AF Form 451 “Request for Packaging” if you need assistance with packaging your HAZMAT. (See AFI 24.202 Amendment 3 for instructions or contact Pam Childers below.)

The Freight Terminal will ensure your container is properly packaged, labeled, and meets all the DOT requirements. They will complete a Government Bill of Lading for the shipment of your HAZMAT.

For more information regarding shipping HAZMAT via the Freight Terminal, AFRL employees should contact:

Pam Childers, AdTech/LMCA x48103 - for assistance with AF Form 1149 or AF Form 451 “Request for Packaging”

Mike Moore, AdTech/LMCA – 59905 x274 – for shipping HAZMAT to Freight Terminal

Jim Peairs –Freight Terminal – 73412 – HAZMAT shipments off Base

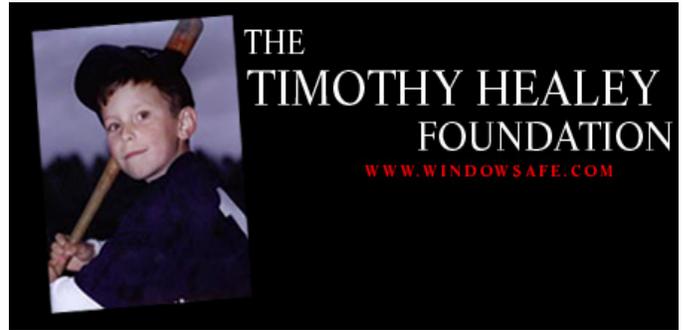
Window Safety at Home

Submitted by SSgt Gerald Mayfield, Safety

Timothy Healey died seven days after accidentally falling through a first floor window in his own home.

He was seven years old. His parents, family and friends were devastated. How could it happen? The fact is it does, too often. Windows are as much a threat to your child as handguns, electrical outlets or household chemicals. Take it seriously. Open only those windows that are out of reach of children. **Teach children not to lean against windows and screens or play near them.**

Never place furniture children can climb on next to a window. And if you have to, install guards or safety bars. Timothy's parents weren't aware that the windows in their home could take their child's life. They don't ever want you to forget it.



In the past six months, there have been two cases of children falling from windows in Base Housing, preceded by one two years ago. All three incidents included beds located below a window. Fortunately the children received only minor injuries. If you have kids, please take a moment to read about how to decrease the likelihood of such events happening in your home.

Some Window Safety Facts:

- 4,700 children are injured by falls from windows in the United States each year.
- Even falling from a first-floor window can kill a child.
- In some cases, children have broken through the glass and fallen out of windows.
- Many windowsills are less than 24 inches off the floor, the average 1 year old is 30 inches tall.
- Falls from windows occur in the child's own home in 96% of the cases.
- If a fall occurs, the landing surface greatly affects the severity of the injury sustained. Shrubs and grass under a window can be a good source of protection.
- 72% of falls from windows are from the second or third story.

Some Window Safety Tips:

- Open windows from the top rather than the bottom.
- If you do open windows from the bottom, open them only 4 inches or less.
- Remember that window screens may give a false sense of security, and are not meant to protect a child from a fall.
- Never place furniture that a child could climb on in front of an unguarded window.
- When installing window air conditioning units, be sure they are installed securely and properly.
- Teach your children not to play near open, unguarded windows, not to lean against window screens, and not to lean out of windows - ever.
- Consider planting shrubs or grass under windows to cushion potential falls. The landing surface can greatly affect the degree of injury sustained from a fall.
- If you install window guards, make sure they are made of strong metal, installed correctly, and be sure that the window frame you are screwing into is not rotted or loose.
- The guards should be easy for adults to open in case of fire.
- Teach your children an escape route in case of fire...and practice with them.

From <http://www.windowSAFE.com/>

Ergonomics : “One Size Does Not Fit All”

by SSgt Linda F. Cadney
74th AMDS/Public Health



Ergonomics is one of those buzzwords we hear so often these days, particularly in the high-tech industry. However, workers in both office and industrial settings are equally at risk. Ergonomics is not new; it has been around since World War II. Recently, it has been given a universal name and comes with a by-product (occupational injury/illness) that has an expensive price tag. This has lead employers to learn what employees have known for years... “One size does not fit all”!

So, what is ergonomics? Simply stated, ergonomics is the science of “fitting the *job* to the *worker*,” instead of forcing the fitting of the *worker* to the *job*. **Ergonomic hazards are one of the fastest growing workplace injuries/illness today.** Large corporations are spending millions each year to combat them because they know that the loss of even one employee due to an ergonomic hazard is very expensive. This problem is even more acute for small business. Neglecting to consider ergonomics can put your entire business and livelihood in jeopardy.

Some examples of job tasks that can increase the likelihood of work related injuries/illnesses include:

- Repetitive motions such as twisting, pinching, torquing, and gripping
- Awkward positions
- Awkward back postures or repetitive lifting (especially heavy objects)
- Vibrating tools
- Use of excessive force to perform assigned job task

Luckily, ergonomic hazards can often be prevented by a few simple changes in the workplace. Start by developing an effective ergonomics program that utilizes and involves the workers that are doing the job.



Some examples of effective ergonomic solutions are:

- Reduce repetitive motions, forceful hand exertions, prolonged bending or working above the shoulder height
- Varying tasks for workers and encouraging micro breaks to allow muscles to recover
- Adjusting workstations to fit your body
- Reduce the size of the items workers must lift or provide lifting equipment to rely on instead of your backs
- Practice proper lifting techniques
- Use specially designed tools and equipment for awkward positions

The key to an effective ergonomic program is early reporting. Prevention involves early recognition of symptoms, appropriate medical treatment, and appropriate workplace intervention. Supervisors must ensure workers are informed about the base ergonomic program, encourage them to seek a medical evaluation and treatment for possible occupational injuries/illness.

Here are some of the most common signs and symptoms experienced while performing required work tasks:

- Numbness of the fingers
- Clumsiness
- Weakened grip
- Tingling burning and pain in the fingers, hands and wrist



If you are experiencing these symptoms or would like additional training and information regarding Ergonomics, contact Public Health at 255-2515.

ESOH Training and Opportunities

First Aid/CPR Training

(AFRL Employees only)

First Aid and CPR Training is required for electrical and confined space workers per 29 CFR 1910.151. The American Heart Association recommends CPR refresher training every two years whereas the American Red Cross recommends CPR refresher training every year. Both agencies recommend First Aid refresher training every three years. Currently the following two courses scheduled with more courses to be scheduled in FY01 as necessary:

CPR Refresher Training – 4 Oct 00, 8:00-12:00

(Does not include First Aid)



First Aid and CPR Training – 1 Nov 00, 8:00–2:30

To schedule for either course, contact [Mary Shelly](#) at x59000.

RCRA Hazardous Waste Training

Annual Refresher Training

AFRL Employees: **18 Oct, 13 Dec 00**

Schedule with [Mary Shelly](#) x59000

Annual Refresher Training for AFRL/PR only – 26 Sep 00

Bldg 18A, Conf. Rm. A-022

Schedule with [John Leonard](#) x54450



Initial Training – 21 Sep and 16 Nov 00

Schedule with [Shelly Baty](#), 77152 x281

ESOH Awareness Training 10 Oct 00

Schedule with Public Health at 52515

For more information on ESOH topics, visit the following Home Pages:

ASC/SEG Safety Office: <https://www.asc.wpafb.af.mil/asc/safety/index.html>

88 ABW Environmental Management: <http://www.abwem.wpafb.af.mil/em/default.cfm>

Bioenvironmental Management: <http://www.bio.wpafb.af.mil/>