



PARTNERS IN HEALTH AT WORK

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Dear Readers,

The timing of this issue coincides with the flu season. The single best way to protect yourself against the flu is to get vaccinated each year. As per the *Centers for Disease Control and Prevention*, “early flu vaccination should begin in September or as soon as vaccine is available and continue throughout the influenza season, into December, January, and beyond. This is because the timing and duration of influenza seasons vary.” To find more about flu vaccine, you can visit: www.cdc.gov/flu/protect/keyfacts.htm.



We wish you a productive and healthy Fall.

Your BOH Team

NEWS & REGULATIONS

On-site Healthcare Gaining Popularity

Many larger companies are expressing new interest in an old concept: on-site healthcare for employees. A recent survey released this year by Watson Wyatt Worldwide, Inc. (a human resources consulting firm), and the National Business Group on Health found that 29% of large employers had an on-site health center or planned to open one by 2009, up from 27% in 2006. In the survey, companies

with on-site centers said they were interested primarily in improving productivity and saving money. Center operators say they can reduce absenteeism, both from sickness and from time-consuming trips to the doctor's office in the middle of a workday. Better primary care can also result in savings by preventing serious illnesses and reducing emergency room visits.

On-site healthcare centers vary greatly in size and scope. Some are staffed by doctors, while others use nurse practitioners and physician assistants. Many companies use outside firms to provide healthcare to maintain the privacy of worker health issues.

The healthcare practice leader for Watson Wyatt in Philadelphia says that while on-site centers can work for companies with as few as 500 employees in one place, they typically serve at least 1,000.

Large Fine at Dental Office for Non-compliance with OSHA Standards

The Occupational Safety and Health Administration (OSHA) may impose \$76,500 in fines against a New Hampshire dental office for violations of bloodborne pathogen and needlestick injury standards.

Most of the proposed fine (\$63,000) falls in the “willful citation” category, since the dental office disregarded OSHA's directive to test the source individual's blood. The rest of the proposed fine is under the “serious citation” category. The dental office failed to provide



post-exposure evaluation, did not review and update policies and procedures annually, had deficient training practices, and did not use sharps with engineered sharps protection.

DOJ: Body Armor Standards

The law enforcement community has had some longstanding concerns about the protective capacity of body armor. For example, in 2003, a police officer in Pennsylvania was severely injured when his body armor vest failed during a shooting. The Body Armor Safety Initiative was launched following that incident. The Department of Justice (DOJ) is promoting new performance standards for body armor to test effectiveness under diverse environmental and situational variables.



These standards ensure that body armor has minimum ballistic and stab resistance and

can function under extreme wear and tear, heat, humidity, etc., and that the vests police officers wear will continue to protect them as the material ages.

You can review the newest standard at <http://www.ojp.gov/nij/pubs-sum/223054.htm>.



Lead (Part II)

The effects of lead are the same whether it enters the body through breathing or swallowing.

Lead can affect almost every organ and system in your body. The main target for lead toxicity is the nervous system. Long-term exposure in adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists or ankles.

Cramping, abdominal pain and constipation are usually seen in acute or subacute exposure.

Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production. Children are more vulnerable to lead poisoning than adults.

We have no conclusive proof that lead causes cancer in humans.

Prevention of exposure to lead

Workplace hygiene is critical. Clean areas for eating should be provided. Showering and cleaning of work garments are mandatory and should be provided at the plant to prevent exposure of children at home.

Wherever the engineering and work practice controls are not sufficient to reduce employee exposure to levels below the permissible exposure limit (PEL) of 0.05 mg/m³ averaged over an 8-hour period, the employer shall supplement them by the use of respiratory protection.

Medical surveillance required under OSHA lead standards (construction, general industry) for workers exposed to air levels greater than 0.03 mg/m³, includes:

Medical examination

- Yearly, if any blood level in previous 12 months exceeded 40 µg/dL.
- Prior to assignment.
- Whenever a worker develops signs or symptoms of lead toxicity.

Whole blood lead and zinc protoporphyrin (ZPP) levels with testing frequency ranging from monthly to every two or six months depending on the previous blood lead level.



Removal from exposure to lead of workers

- whose blood levels exceed 60 µg/dL.
- whose average lead levels exceed 50 µg/dL.
- at risk of health impairment (medical decision).

Workers may be returned to the exposure if two consecutive blood lead levels are less than 40 µg/dL, or when the medical determination is made that they are no longer at risk.

Prognosis

Early diagnosis and treatment of lead toxicity will generally result in complete recovery. Once kidney or neurologic injury has occurred, only partial recovery is expected.

References:

1. Joseph LaDou, MS, MD, *Current Occupational & Environmental Medicine*, Fourth Edition, 2007
2. OSHA Lead Standards: 1910.1025 (General Industry) and 1926.62 (Construction)
3. ATSDR; *Toxicological Profile for Lead*, August 2007; www.atsdr.cdc.gov/toxprofiles/tp13.html

Prepared by Dr. Damir Mazlagic



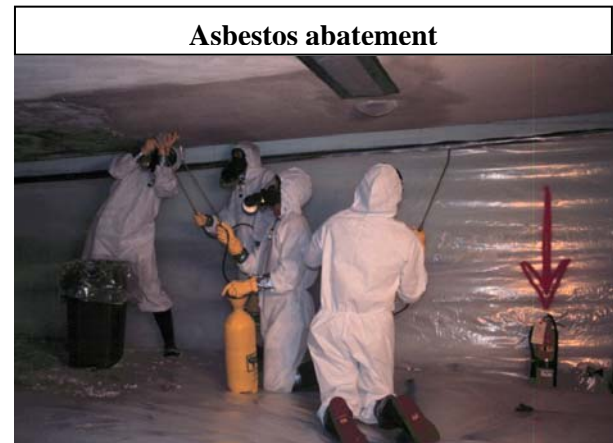
Asbestos

Asbestos is the name given to a group of fibrous minerals that occur naturally in the environment. Asbestos minerals are resistant to heat and do not degrade in water or chemicals. Because of these properties they are used in many products such as building materials, vehicle brakes and clutches, and heat-resistant fabrics.

Asbestos has been in widespread use for more than a century. Since the early 1970's asbestos use in the United States has been regulated because of the adverse health effects of exposure. Use of asbestos in the U.S. has been declining. However, worldwide production and use is increasing. Workplace exposure is still significant in the U.S.; the National Institute for Occupational Safety and Health estimates 2 to 2.5 million American workers

are still exposed to asbestos in the workplace. Examples of occupations at risk include asbestos miners, automobile repair workers, construction workers, demolition workers, roofers and loggers.

The health effects of asbestos occur long periods of time after the initial exposure to the fibers. Asbestos exposure can cause cancer and non-cancer diseases. Cancers of the lung and larynx are the most common cancers associated with asbestos exposure. If a worker exposed to asbestos also smokes he or she is at extremely high risk for the development of lung cancer.



Another cancer associated with asbestos exposure is malignant mesothelioma of the pleura (lung lining) or peritoneum (abdominal cavity lining). These tumors grow rapidly and are fatal. There is no effective treatment. Cancers of the gastrointestinal tract are also more frequent in those exposed to asbestos.

Non-cancerous pulmonary fibrosis is a build up of a scar-like tissue in the lungs. This tissue does not expand and contract like lung tissue and causes cough and shortness of breath which can be disabling. Thickening of the lining of the lungs (pleural plaques) can also develop.

The risk for developing diseases related to asbestos exposure depends on several factors,



including the level of asbestos in the air, the length of exposure, and if there is also exposure to cigarette smoke.

The Occupational Safety and Health Administration (OSHA) has three standards to protect workers from asbestos exposure in the workplace. The standards cover construction work, shipyards and general industry. Exposure to asbestos must not exceed 0.1 fiber per cubic centimeter of air (f/cc), averaged over an 8 hour shift. Short-term exposure is limited to not more than 1 f/cc, averaged over 30 minutes. Monitoring of the air is required at different frequencies depending on the industry and the classification of exposure. Regulated areas are controlled zones which must be set up around an area where asbestos work is being performed. Within the area, the workers must use appropriate respiratory protection and there is no eating, smoking or drinking. Exposures must be controlled using engineering and work practices whenever feasible. If the permissible exposure limits are still exceeded, respirators must be used. This requires respirator training and medical clearance. Protective clothing must be worn and decontamination areas must be set up. Worker training and a medical surveillance program are required.

The Environmental Protection Agency has established regulations to protect the general population from asbestos exposure. These include a ban on new uses of asbestos since 1989. Uses established before this date are still allowed. School systems are required to inspect for asbestos and if damaged asbestos is found, it must be either removed or covered. The release of asbestos from factories and during building demolition is regulated. Asbestos disposal is regulated, as is use of asbestos in drugs and packaging.

The only way to prevent asbestos-related disease is to control or eliminate exposure to

it. The use of other materials to replace the asbestos does not solve the problem because the exposure to asbestos already in place will continue. Disease prevention depends on recognition of the potential for exposure and strict compliance with health and safety regulations.

Prepared by Dr. Jean Culver



DOT Medical Examination (PART 1)

At Berkshire Occupational Health it is a priority to keep current with the DOT (Department of Transportation) Medical Examiner guidelines for the DOT physical exams and issuance of DOT medical cards.

The purpose of the medical exam is to improve the safety of the drivers on the roadways. The driver must meet the minimum standards to safely drive and perform the other essentials of his or her job. Since January 1, 1954, a physical exam and certificate of physical examination have been required of commercial motor vehicle (CMV) drivers.



Ensuring the medical fitness of the people who drive CMVs is a challenge for health care professionals. It

is well documented that certain medical conditions play a part in motor vehicle accidents. Over the years, the medical qualification standards have been amended as medical knowledge has evolved. The medical examiner guidelines are based on current medical knowledge, therefore the guidelines periodically change as diseases are better understood, and as new medications and treatments are prescribed.

At Berkshire Occupational Health, we monitor the Federal Motor Carrier Safety



Administration (FMCSA) and the National Registry of Certified Medical Examiners (NRCME) websites for up-to-date rulings.

The medical form contains four sections:

1. Health History section for the driver to complete and sign.
2. Testing section for vision, hearing, blood pressure, height, weight, and testing of the urine for glucose, blood and protein.
3. Physical examination section.
4. Instructions to the examiner and advisory criteria.

Advisory criteria are recommendations for medical examiners to use in determining whether a driver meets the physical qualifications for commercial driving. Criteria include guidelines for a broad array of conditions including cardiovascular, diabetes, epilepsy, sleep disorders, drug use.

After the completion of the physical exam and review of health history, the examiner will determine if the driver meets the standards for certification or if more information is needed. In many cases where the driver has existing medical conditions, additional information or specialist evaluations may be required. In some cases, the medical card will not be issued until the examiner has reviewed that information.

About one in three drivers are given less than a 2-year certification, as they have medical conditions that do not prohibit driving but require closer monitoring. The medical form contains an option for the examiner to have the driver return at a later date for additional evaluation.

The completed driver's medical examination card will contain the practitioner's name, state and medical license number, office address and phone number. The card will have the date of the examination as well as an expiration date.

Prepared by Susan Smith, NP

WELLNESS & PREVENTION

Seasonal Influenza (Flu) Vaccination

On average, 226,000 people are hospitalized every year because of influenza and 36,000 die, mostly elderly. Influenza vaccine can prevent influenza.

In general, anyone who wants to reduce their chances of getting the flu can get vaccinated.



However, it is recommended that certain people get vaccinated each year either because they are at high risk of having serious flu complications or because they live with or care for those at high risk for serious complications.

There are two types of influenza vaccine:

1. Inactivated (killed) vaccine, or the "flu shot" is given by injection into the muscle;
2. Live, attenuated (weakened) influenza vaccine is sprayed into the nostrils.

People who should get vaccinated each year are:

- Children aged 6 months up to their 19th birthday;
- Pregnant women;
- People 50 years of age and older;
- People of any age with certain chronic medical conditions;
- People who live in nursing homes and other long-term care facilities;
- People who live with or care for those at high risk for complications from flu, including:
 - a. Health care workers
 - b. Household contacts of persons at high risk for complications from the flu
 - c. Household contacts and out of home caregivers of children less than 6 months of



age (these children are too young to be vaccinated).

People who should not be vaccinated without consulting a physician are:

- People who have a severe allergy to chicken eggs;
- People who have had a severe reaction to an influenza vaccination;
- People who developed Guillain-Barré syndrome (GBS) within 6 weeks of getting an influenza vaccine;
- Children less than 6 months of age (influenza vaccine is not approved for this age group); and
- People who have a moderate-to-severe illness with a fever (they should wait until they recover to get vaccinated).

These recommendations refer mostly to the killed virus vaccine (“flu shot”). The live vaccine can be used for healthy people 2-49 years of age who are not pregnant. People with certain health problems (e.g., heart disease, asthma, anemia) should receive the “flu shot” instead of the live vaccine.

Berkshire Occupational Health offers influenza vaccine to the Berkshire area employees through their employers. If you are an employer interested in setting up a “flu clinic” for your employees, please contact Patricia Haner, a program manager, to get more information (413-447-2684; phaner@bhs1.org).

Reference:

1. Centers for Disease Control and Prevention, *Seasonal Flu*, <http://www.cdc.gov/flu>

Prepared by Dr. Damir Mazlagic

**BERKSHIRE HEALTH SYSTEMS
NEWS**

Berkshire VNA Schedules Flu Clinics

The Berkshire Visiting Nurse Association is ready to serve you again in 2008 with a series of public Flu Vaccine Clinics, to be held from October through December. We make it quick and easy to get your flu shot.

All BVNA Public Flu Clinics will be held at Hillcrest Campus of Berkshire Medical Center, 165 Tor Court, Pittsfield, MA.

All adults, aged 18 and over, are eligible for the vaccine at a BVNA Flu Clinic.

For the BVNA Flu Clinic Schedule, visit www.berkshirehealthsystems.org.

The Flu Clinics at the Hillcrest Campus of BMC provide easy access and plenty of free parking. If you have any questions related to the flu clinic, please call the Berkshire VNA at 413-447-2862.

QUESTIONS/COMMENTS/SUGGESTIONS
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