

TCOM NEWSLETTER

A health and safety publication of Total Care Occupational Medicine
a division of Priority Medical Care

Volume 17

Fall/Winter 2009

MEDICAL NEWS BRIEFS

ILO Adopts New List of Recognized Occupational Diseases

GENEVA (ILO News) – A tripartite meeting of experts on occupational diseases held at the International Labour Office (ILO) has adopted a new list of occupational diseases designed to assist countries in the prevention, recording, notification and, if applicable, compensation of illnesses caused by work.

The panel of experts examined a proposed list of occupational diseases developed through tripartite consultations, on the basis of increased recognition of occupational diseases at the national and international levels, new and emerging risk factors and the improvement of diagnostic techniques.

“The number of physical, chemical, biological and psychosocial factors affecting workers’ health is constantly on the rise, as well as the number of occupational diseases included in national occupational safety and health programmes and compensation schemes. It is therefore necessary to review the list of occupational diseases regularly and to add those newly identified as occupational in order to maximize the effectiveness of preventive strategies and appropriate compensation schemes. This meeting has been a step in the right direction,” said Sameera Al-Tawaijri, head of the ILO’s Programme on Safety and Health at Work and the Environment (Safework)

The revised list includes a range of internationally recognized occupational diseases, from illnesses caused by chemical, physical and biological agents to respiratory, skin and musculoskeletal disorders and occupational cancer. It also includes a section on mental and behavioural disorders. Once it is approved by the ILO Governing Body at its March 2010 Session, the new list will replace the one in the Annex to the Recommendation concerning the List of

Occupational Diseases and the Recording and Notification of Occupational Accidents and Diseases, 2002, (No. 194).

Participants at the meeting followed a set of general criteria agreed by the tripartite constituents to decide what specific diseases to include in the updated list: that there is a causal relationship with a specific agent, exposure or work process; that they occur in connection with the work environment and/or in specific occupations; that they occur among the groups of persons concerned with a frequency which exceeds the average incidence within the rest of the population; and that there is scientific evidence of a clearly defined pattern of disease following exposure and plausibility of cause.

The original List of Occupational Diseases Recommendation (no.194) was adopted at the 90th Session of the International Labour Conference in 2002. A first meeting of experts to revise the list took place in 2005.

High Cost Providers

A study of Louisiana worker compensation claims sought to identify physicians who were responsible for escalating work injury costs. The researchers looked at “migratory claims” - minor injuries such as a strain that lead to unanticipated escalating costs. Another term for this type of claim is “adverse surprise claims.” Both are associated with longer disability, higher indemnity and medical costs. The scientists from Johns Hopkins University School of Medicine looked at claims by diagnosis and compared the costs associated with various doctors. They found that physicians who were “cost intensive” accounted for only 3.8% of all physicians providing care, but accounted for 72% of the costs! So who were the cost intensive physicians whose care cost an average of 4 times more than other physicians? Orthopedic surgeons, pain management specialists, and anesthesiologists. There were no occupational medicine physicians represented in the cost intensive group.

- *JOEM, 52:1, January 2010*

Formaldehyde and Cancer Risk

Results from an ongoing study of workers employed at plants that used or produced formaldehyde continue to show a possible link between formaldehyde exposure and death from cancers of the blood and lymphatic system, particularly myeloid leukemia. The report, by researchers at the National Cancer Institute (NCI), part of the National Institutes of Health, provides an additional 10 years of follow-up data to build on previous findings from this study. The report appeared online May 12, 2009, and in print May 20, 2009, in the Journal of the National Cancer Institute.

"The overall patterns of risk seen in this extended follow-up of industrial workers, while not definitive, are consistent with a causal association between formaldehyde exposure and cancers of the blood and lymphatic system and warrant continued concern. Further studies are needed to evaluate risks of these cancers in other formaldehyde-exposed populations and to assess possible biological mechanisms," said lead author of the report, Laura E. Beane Freeman, Ph.D., NCI Division of Cancer Epidemiology and Genetics.

Formaldehyde is widely used for industrial purposes and as a preservative and disinfectant. The International Agency for Research on Cancer classifies this chemical as a human carcinogen, based primarily on its association with nasopharyngeal cancer. In 1995, the U.S. Occupational Safety and Health Administration estimated that approximately 2.1 million workers in the United States were exposed to formaldehyde.

Since the 1980s, NCI has studied cancer deaths among a group of 25,619 workers, predominately white males, who were employed before 1966 in 10 industrial plants that produced formaldehyde and formaldehyde resin and that used the chemical to produce molded-plastic products, decorative laminates, photographic film, or plywood. In a previous report from this study, which included data on cancer deaths through 1994, researchers showed that the risk of death from leukemias (myeloid leukemia in particular) increased with higher levels of formaldehyde exposure.

In this report, which includes an average follow-up of over 40 years, researchers found a statistically significant association between death from all blood and lymphatic cancers combined and peak formaldehyde exposure. Workers with the highest peak exposures had a 37 percent increased risk of death compared to those with the lowest level of peak exposures. This represents an excess risk of death from several specific cancers, including Hodgkin's lymphoma, multiple myeloma, and myeloid leukemia -- the type most often associated with chemical exposure.

In this study, the risk of death from myeloid leukemia was 78 percent higher among industrial workers with the highest peak exposures compared to those with the lowest peak exposures. Excess risks of death from myeloid leukemia have also been reported among pathologists, embalmers, and other professionals who experience high-intensity peak exposures to formaldehyde. The highest level of increased risk of death from myeloid leukemia in this study occurred early on and has been declining steadily over time. This pattern could be due to chance, but the investigators note that similar patterns of risks

Combustible Dust Hazards

Combustible dusts are solids that have been ground into fine particles, fibers, chips or flakes that can cause a fire or explosion under certain conditions. Aluminum, magnesium, wood, plastic, rubber, flour, sugar and paper dusts are all combustible. The Occupational Safety and Health Administration (OSHA) initiated a National Emphasis Program on combustible dusts in 2007. In October of 2009, OSHA announced a Notice of Proposed Rulemaking. The notice is the first step necessary in issuing a new OSHA Standard. Jordan Barab, the acting Assistant Secretary of Labor explained that "Since 1908, more than 130 workers have been killed, and more than 780 injured in combustible dust explosions." Many manufacturing processes create both visible and invisible dust that can explode if suspended at the right concentration and with a proper ignition source (e.g. heat, flame, or friction). The NFPA publishes recommendations on dust hazards.

[Links to Resources on Combustible Dusts](#)

[NFPA 654: Prevention of Fire and Dust Explosions](#)

[OSHA Combustible Dust Guidance](#)

[CSB Video on Combustible Dust](#)

over time have been seen for agents that are known to cause leukemia relatively soon after exposure.

"We know that various groups of professionals who may experience high peak exposures to formaldehyde are at increased risk of leukemia, but the evidence from studies of industrial workers, among whom exposure levels and patterns may be more variable, has been conflicting. The fact that we see an excess in this study of industrial workers, which is both the largest and the one with the most extensive exposure assessment, is notable," said Beane Freeman.

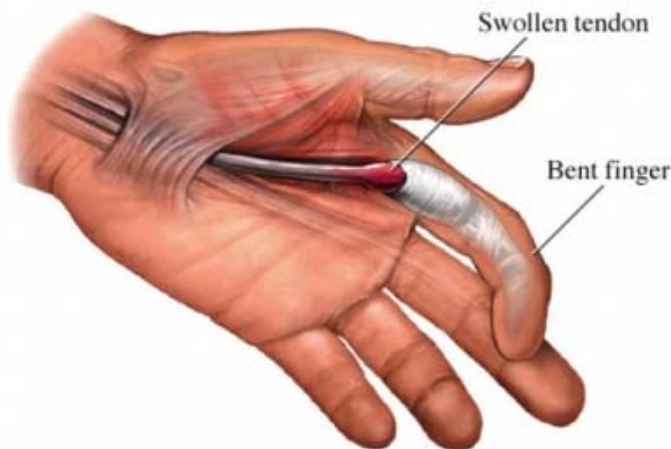
Based on the available data, scientists have not been able to identify a mechanism for how normal white blood cells might become leukemic following exposure to formaldehyde, because there is no direct evidence that formaldehyde damages cells in the bone marrow. However, studies of humans exposed to inhaled formaldehyde have shown higher rates of damage to their chromosomes in a type of mature white blood cells compared with rates in individuals who were not exposed to formaldehyde. Although the relevance to the development of leukemia of such chromosomal damage to mature white blood cells is not clear, agents that cause leukemia are also known to be associated with chromosomal aberrations in the peripheral blood cells of humans.

This study is also the first to report a statistically significant association between a chemical exposure and increased risk of death from Hodgkin lymphoma. Although based on a small number of deaths, the finding may warrant further study.

Trigger Finger

Trigger finger (or thumb) is the common name for **nodular tenosynovitis**, a condition of swelling in the flexor tendon of the finger. Localized swelling produces a lump that must squeeze through a fibrous tunnel that anchors the tendon to prevent it from bowing under tension. When it gets to the other side of the tunnel, the lump gets stuck. When the finger tries to straighten, the patient finds that the finger is stuck in the bent position, thus giving it the name of “trigger finger” – it looks as if it is stuck squeezing a trigger. Tenderness is present at the base of the finger.

Trigger finger is caused by acute or repetitive trauma to the tendon where it crosses from the palm into the finger. Onset can be sudden or gradual, and is seen in many employees who use pneumatic or vibrating power tools. The condition needs to be treated early, because the longer it is present, the less likely it is to respond to conservative treatment. If treated within three weeks of onset, the condition has a good chance of responding to a steroid injection. Steroids bathe the tendon and reduce swelling, thereby allowing the tendon to move freely within the fibrous sheath. If the condition fails to respond to injection, a simple surgical procedure can release the fibrous sheath, allowing the tendon to pass back and forth without restriction.



Total Care Occupational Medicine *YOUR ADDRESS FOR*

- ✓ Worker Compensation Injury Care
- ✓ Disability Evaluation
- ✓ Second Opinion
- ✓ Causation Determination
- ✓ Permancy and Partial Disability Determinations
- ✓ In-house Orthopedics
- ✓ Medical Fitness for Work Determination
- ✓ Pre-placement, DOT, HAZMAT, Crane Operator, Respirator, and Powered Industrial Vehicle Operator Exams
- ✓ Qualitative Respirator Fit Testing
- ✓ Urine Drug Screen and Breath Alcohol Test
- ✓ Certified MRO Services/ DOT Random Selection Management
- ✓ PPD/ Tuberculosis Screening
- ✓ Workplace Allergy Evaluation
- ✓ Medical Surveillance

If it's not on our list, but it is on yours, just give us a call: 732-748-1900. Central New Jersey's most comprehensive Occupational Health program will find an answer for your needs.

Priority Medical Care

Urgent Medical and Family Health Center

350 Grove Street @ Route 22 East

Bridgewater, NJ

908-231-0777

Winter Driving Safety

Driving in Snow and Ice

The best advice for driving in bad winter weather is not to drive at all, if you can avoid it. Don't go out until the snow plows and sanding trucks have had a chance to do their work, and allow yourself extra time to reach your destination. If you must drive in snowy conditions, make sure your car is prepared and that you know how to handle road conditions.

It's helpful to practice winter driving techniques in a snowy, open parking lot, so you're familiar with how your car handles. Consult your owner's manual for tips specific to your vehicle.

Driving safely on icy roads:

1. Decrease your speed and leave yourself plenty of room to stop. You should allow at least three times more space than usual between you and the car in front of you.
2. Brake gently to avoid skidding. If your wheels start to lock up, ease off the brake.
3. Turn on your lights to increase your visibility to other motorists.
4. Keep your lights and windshield clean.
5. Use low gears to keep traction, especially on hills.
6. Don't use cruise control or overdrive on icy roads.
7. Be especially careful on bridges, overpasses and infrequently traveled roads, which will freeze first. Even at temperatures above freezing, if the conditions are wet, you might encounter ice in shady areas or on exposed roadways like bridges.
8. Don't pass snow plows and sanding trucks. The drivers have limited visibility, and you're likely to find the road in front of them worse than the road behind.
9. Don't assume your vehicle can handle all conditions. Even four-wheel and front-wheel drive vehicles can encounter trouble on winter roads.

If you get stuck...

1. Do not spin your wheels. This will only dig you in deeper.
2. Turn your wheels from side to side a few times to push snow out of the way.
3. Use a light touch on the gas, to ease your car out.
4. Use a shovel to clear snow away from the wheels and the underside of the car.
5. Pour sand, kitty litter, gravel or salt in the path of the wheels, to help get traction.
6. Try rocking the vehicle. (Check your owner's manual first — it can damage the transmission on some vehicles.) Shift from forward to reverse, and back again. Each time you're in gear, give a light touch on the gas until the vehicle gets going.



Preparing Your Car for Winter Driving

- ✓ Remove snow from your vehicle's lights, windows, brake lights and signals
- ✓ Inspect tires, wiper blades, belts, and lights – replace worn out tires, belts, and wiper blades
- ✓ Check and top off fluids (oil, windshield, antifreeze, brake). Always drive with at least half a tank of gas
- ✓ Carry emergency supplies: blanket, small shovel, sand or kitty litter, flashlight, cell phone, water and emergency snacks