Preventing Occupational Illness



WHAT'S AT STAKE?

The Injuries, Illnesses, and Fatalities (IIF) program produces a wide range of information about workplace injuries and illnesses. These data are collected and reported annually through the Survey of Occupational Injuries and Illnesses (SOII) and the Census of Fatal Occupational Injuries (CFOI).

An injury or illness is considered by the Occupational Safety and Health Administration to be work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing condition.

WHAT'S THE DANGER?

STATISTICS

In 2016, the U.S. Bureau of Labor Statistics reported 2.9 million non-fatal workplace injuries and illness by private industry employers. This continues a steady, downhill trend since 2003. 5,190 fatal work injuries also occurred in 2016.

RECORDABLE CASES

Recordable cases include work-related injuries and illnesses that result in:

- Death
- Loss of consciousness
- Days away from work
- Restricted work activity or job transfer
- Medical treatment (beyond first aid)
- Significant work related injuries or illnesses that are diagnosed by a physician or other licensed health care professional. These include any work related case involving cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum.
- Additional criteria that can result in a recordable case include:
- Any needlestick injury or cut from a sharp object that is contaminated with another person's blood or other potentially infectious material.
- Any case requiring an employee to be medically removed under the requirements of an OSHA health standard.
- Tuberculosis infection as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional after exposure to a known case of active tuberculosis.
- An employee's hearing test (audiogram) reveals 1) that the employee has

experienced a Standard Threshold Shift (STS) in hearing in one or both ears (averaged at 2000, 3000, and 4000 Hz) and 2) the employee's total hearing level is 25 decibels (dB) or more above the audiometric zero (also averaged at 2000, 3000, and 4000 Hz) in the same ear(s) as the STS.

OCCUPATIONAL ILLNESSES

Skin diseases or disorders are illnesses involving the worker's skin that are caused by work exposure to chemicals, plants or other substances. Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; inflammation of the skin.

Respiratory conditions are illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors, or fumes at work. Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer's lung, beryllium disease, tuberculosis, occupational asthma, reactive airways dysfunction syndrome (RADS), chronic obstructive pulmonary disease (COPD), hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis and other pneumoconioses.

Poisoning includes disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids, or the breath that are caused by the ingestion or absorption of toxic substances into the body. Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals; poisoning by carbon monoxide, hydrogen sulfide, or other gases; poisoning by benzene, benzol, carbon tetrachloride, or other organic solvents; poisoning by insecticide sprays such as parathion or lead arsenate; poisoning by other chemicals such as formaldehyde.

Hearing loss Noise-induced hearing loss for recordkeeping purposes is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more in either ear at 2000, 3000, and 4000 hertz and the employee's total hearing level is 25 decibels (dB) or more above the audiometric zero (also averaged at 2000, 3000, and 4000 hertz) in the same ear(s).

All other occupational illnesses Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite, and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (isotopes, x-rays, radium); effects of nonionizing radiation (welding flash, ultra-violet rays, lasers); anthrax; bloodborne pathogenic diseases such as AIDS, HIV, hepatitis B or hepatitis C; brucellosis; malignant or benign tumors; histoplasmosis; coccidioidomycosis.

HOW TO PROTECT YOURSELF

INJURY AND ILLNESS PREVENTION PROGRAM

An injury and illness prevention program, is a proactive process to help employers find and fix workplace hazards before workers are hurt. These programs can be effective at reducing injuries, illnesses, and fatalities. Not only do these employers experience dramatic decreases in workplace injuries, but they often report a transformed workplace culture that can lead to higher productivity and quality, reduced turnover, reduced costs, and greater employee satisfaction.

Thirty-four states and many nations around the world already require or encourage employers to implement such programs. **The key elements common to all of these programs are:**

- management leadership
- worker participation
- hazard identification and assessment

- hazard prevention and control
- education and training
- program evaluation and improvement.

THE PROGRAM EXPLAINED

- **Management leadership:** Management should establish overall goals for safety and health within the organization, then define the actions needed to meet these goals. Corporate leadership should designate one or more individuals to provide oversight for the program and provide sufficient resources for implementation.
- **Worker participation**: Consult with employees during development and implement of the program. Workers at various levels may have a role in workplace inspections and incident investigations. Everyone should be encouraged to report hazards, safety concerns, near misses, injuries, and illnesses.
- **Hazard identification and assessment**: Identify, assess, and document workplace hazards using a variety of methods: workplace inspection, employee interviews, illness assessments and injury investigations.
- **Education and training**: Educate and train workers using a language they can understand. Review the procedures for reporting workplace injuries, illnesses, and other health and safety concerns. Include how to recognize, control, and eliminate existing and potential hazards. Education and training should be conducted periodically.
- **Program evaluation and improvement:** Periodically review the program to determine its success. Make any needed changes and keep working to improve the program and its results.

BENEFITS OF PREVENTION

Workplace injuries and illnesses not only have emotional and physical costs, but can also be a significant financial burden on businesses in terms of workers' compensation and fines. Additionally, there are indirect costs to consider:

- Replacement costs for damaged premises and equipment/machinery.
- Costs due to work stoppage when an accident occurs and is investigated.
- Lost productivity from recovering workers and/or training and hiring replacements.
- Administration costs to document the accident and follow-up with affected employees.

FINAL WORD

An injury and illness prevention program is a proactive process to help employers find and fix workplace hazards before workers are hurt. These program can be effective at reducing injuries, illnesses and fatalities.