



In Touch

EHS Newsletter June 2017

WORKPLACE FATIGUE

Fatigue is a message to the body to rest. It is not a problem if the person can and does rest. However, if rest is not possible, fatigue can increase until it becomes distressing and eventually overwhelming.

> The symptoms of fatigue vary and do depend on the person and their degree of fatigue or sleep deprivation. These may

Weariness ■ sleepiness ■ irritability ■ reduced alertness, concentration and memory lack of motivation ■ increased susceptibility to illness ■ depression ■ headache ■ giddiness ■ loss of appetite and digestive problems

Working at Night - Measures that can be used to address the associated risks include:

- Consider whether night work is necessary and rearrange schedules so non-essential work is not carried out at night.
- Allow a 24-hour rest period between each set of shifts for night-shift workers.
- Keep sequential night shifts to a minimum (no more than four nights in a row).
- Provide an adequate period of non-work following a sequence of night
- Allow regular night workers periods of normal night's sleep to catch up on their sleep debts.
- Ensure that rosters allow for at least two full nights' sleep after the last night shift.
- Arrange shifts so that day sleep is not restricted.
- Except for emergencies, give at least 24 hours notice before night work. Consider providing a longer period of notice so that workers have time to adjust their activities.

In addition to the work-related factors that contribute to fatigue, it is important to identify factors that cause fatigue due to sleep deprivation. These include:

- lifestyle e.g. having caring/child care responsibilities, voluntary work, having more than one job, level of fitness, social life or diet.
- home environment e.g. noisy neighbours or a bedroom that is too hot or not dark enough for day-time sleep.
- health conditions e.g. insomnia, sleep apnoea or alcohol/drug dependence.

associated with shiftwork and chronic sleep loss may include: heart disease

Long-term effects on

health that are

- diabetes
- high blood pressure
- gastrointestinal disorders
- depression
- anxiety

Research has shown that the number of hours awake can be similar to blood alcohol levels

17 hours awake = blood alcohol content of 0.05 21 hours awake = blood alcohol content of 0.08 24-25 hours awake = blood alcohol content of .10

WE PROVIDE A NUMBER OF DIFFERENT SERVICES TO ASSIST OUR CLIENTS THAT INCLUDE:

- EHS Risk Assessments
- Occupational Hygiene Surveys
- Ergonomics Surveys
- EHS Management System development and implementation
- Environmental Monitoring
- Identification of EHS Legal Requirements and Compliance **Audits**
- Internal Auditor **Training**
- General EHS Training





OH0049



DoL Approved Inspection Authority (OH0049-CI-09)

Newsletter compiled by Lee Rands

Public Courses Port Elizabeth



* HWSETA Accredited ** Unit Standard Aligned

2nd 9th 19th 23rd

5th - 7th 10th - 12th 31st July – 2nd Aug

Safetrain cc t/a Safetech is a SANAS Accredited Inspection Body, Nr. OH 0049. Refer to www.sanas.co.za for Directory Accredited Facilities, Inspection Bodies for schedule of accreditation.

JUNE

SHE Rep Refresher Introduction to the OHS Act Construction Regulations Hazardous Chemical Substances Regulations

JULY

SHE Reps *

SHE for Supervisors **

Basic Principles in Occ Hygiene

SAFETECH

Southern Office

Tel: +27 (0)41 365 6846

Fax: +27 (0)41 365 2123

Northern Office

Tel: +27 (0)82 4111 571

Fax: +27 (0)86 6579 864

carlita.westoby@safetech.co.za

PO Box 27607

Port Elizabeth

info@safetech.co.za

PO Box 80171

Doornpoort

Pretoria

0017

Greenacres

6057



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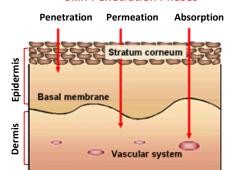
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CHEMICAL ABSORPTION & SKIN NOTATIONS

The skin is made up of two layers (epidermis and the dermis). The outer layer of the epidermis is composed of a compacted layer of dead epidermal cells, which is the primary barrier for protection against chemical penetration into the body. Once they diffuse through this barrier, they are carried into the body by the blood flow supplied to the dermis. Physically damaged skin and skin damaged from chemical irritation, sensitisation or sunburn will generally absorb chemicals at a much greater rate than intact skin. Understanding the hazards related to skin contact with chemicals is a critical component of an Occupational Health and Safety Program and these factors should be taken into account in determining the adequacy of the control measures.

Although for most substances the main route of entry into the body is by inhalation, there are a number of substances have the ability to penetrate the skin by 1) airborne exposure to gases, vapours or liquids or 2) direct contact with the skin. Studies show that absorption of chemicals through the skin can occur without being noticed by the worker and in some cases, may represent the most significant exposure pathway. Many commonly used chemicals in the workplace could potentially result in systemic toxicity if they penetrate through the skin (i.e. pesticides and organic solvents).

Skin Penetration Phases



Skin Notations

Occupational Hygienists have traditionally relied on inhalation-based exposure guidance (occupational exposure limits or OELs) for assessing risks to worker health. However, these OELs do not directly account for potential skin exposures. To warn workers of impacts of dermal contact, **Skin Notations** are assigned for chemicals that can be absorbed through the skin.

Three ways of determining whether a chemical has a skin notation:

- 1. Refer to the OHS Act, Hazardous Substances Regulations (Occupational Exposure Limits)
- 2. Refer to the NIOSH Pocket Guide to Chemical Hazards
- 3. Refer to Material Safety Data Sheets

https://www.cdc.gov/piosh/topics/skin/default.html

http://bers.org/ART/Dermsl/NIOSUN/20Dermslif/20pocter%/20SRAM/202007

Health and Welfare Sector Education and Training Authority HWSETA HW592A1000508



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"Deskercise"

Smart ways to exercise at work

New scientific research is revealing that sedentary office workers are doing long-term damage to their health by sitting all day. A desk job has been found to increase your heart disease risk by 64%, while shaving up to 7 quality years off your life, and it has been linked to chronic health problems like high blood pressure, depression, diabetes and obesity.



If your chair swivels then you can use that to help strengthen your core muscles. Sit straight in your chair with your feet hovering above the floor and hold onto the edge of your desk with your fingers and thumb. With your core muscles engaged, use them (rather than your arms) to swivel your chair from side to side.



Put your head in your hands, the way most desk dwellers do when they are tired or have just had a difficult conversation. Press your palms into your forehead and try to push your head backwards. Resist the motion. Then switch the hands to the back of the head and try to push your head backwards.



Sit on your chair, feet flat on the floor. Extend one leg out in front of you, hold for 2 seconds. Raise it as high as you can and hold for 2 seconds. Repeat 15 times on each leg.



If you spend a lot of time typing at your desk, you may be at risk from carpal tunnel syndrome. To lower the risk simply carry out this move every day. Stand at your desk, place your palms on the desk with your fingers facing towards you. Keep your arms straight and lower your body until you feel the stretch. Hold for 15 seconds.

