Occupational SHE Management

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QCTO: Occupational Health, Safety Quality Practitioner Qualification – NQF Level 2

ISO NET (Pty) Ltd

Learner Guide

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OCCUPATIONAL HEALTH

Introduction

Ill health can have a major impact on your life. Most ill health problems are often invisible, develop slowly or are only visible later in your life.

It makes a difference to prevent conditions that could lead to ill health in the workplace by taking proper action.

The cost of ill health is increasing – both to you are your employer. Ill health affects your quality of life and you can lose income.

It affects the employer in terms of increased sickness absence and a less healthy workforce which leads to a loss of productivity.

History of occupational health

Even though occupational hygiene, as a formal discipline, has rapidly emerged and gained credibility within the past several decades, it has a long and established history; mostly in the mining industry.

As early as the Fourth Century BC, lead toxicity in the mining industry was recognised and recorded. In the First Century AD, a roman scholar referred to hazards associated with handling zinc and sulphur. Protective masks, early respirators made out of animal bladders, were used by labourers to reduce the amount of dust miners breathed.

In the Second Century AD, hazardous exposures in copper mining were written about by a Greek physician living in Rome. Not much more was recorded about occupational hygiene issues until the Fifteenth and Sixteenth Centuries AD, when occupational illnesses and injuries in the mining and related smelting industries were recorded. Miners were so afraid they were going to get sick in the mines that legends abounded about mines being inhabited by "demons."

Today, it is clear that many of these illnesses centred around working with metals such as lead, gold, zinc, tin, mercury and others. It is interesting to note that the terms "Mad hatter" and "Cracked Pot" came about because of the central nervous system disorders resulting from exposures to these metals, particularly Lead. *Bernardo Ramazzini*, an Italian physician, wrote a book called *The Diseases of Workmen* in 1700; he is considered to be the *Father of Industrial Medicine.*

Occupational Hygiene emerged as an important discipline in the early 1970's. Due to the nature of the hazards causing workplace illnesses, a technical or engineering approach was traditionally used as the primary method for controlling health hazards.

Occupational health management system

The best approach for managing a site's occupational health activities is to integrate them with safety, health, and environmental management whenever possible.

Training, investigating incidents, taking appropriate corrective actions, developing proper procedures, inspecting, measuring and monitoring the site's programs and much more are part of an effective health management system.

Occupational health as a multidisciplinary entity consists minimally out of three functions namely:

1. **Occupational hygiene,**

2. **Occupational health practice, and**

3. **Occupational medicine practice.**

However, the scope of occupational health is much wider than these three disciplines. Other, equally important disciplines also play a vital role, and could include any specialist in fields such as acoustical engineering, chemical engineering, ventilation engineering, etc. and specialists in the fields of chemistry, geology, radiation, vibration, etc.

Occupational hygiene/health/ medicine

Occupational hygiene, occupational health practice and occupational medicine practice can not be managed in isolation due to the dose-response relationship of health hazards.

Results from any of these speciality fields are interrelated in order to reflect the probability of absorption, the level of absorption as well as the effectiveness of control measures visible in a decrease in exposure and absorption levels. These functions may have a personalised and/or a generalised approach or a combination thereof in addressing all the direct and underlying variables in the dose-response relationships.

Through this interactive approach they primarily act pro-actively as part of a baseline assessment, although medicine is generally viewed to be curative in nature.

Occupational hygiene focus primarily on determining workplace exposure levels of health hazards and the probability that absorption thereof could take place.

Occupational health and occupational medicine focus on determining the actual absorption of these health hazards.
Together they close the loop

Recently, a management systems approach to controlling health hazards has emerged. The management systems approach complements the traditional engineering approach and even ensures that proper engineering, as well as other methods to recognise, evaluate and control health hazards are used. Dr. Edward Deming, often referred to as the Father of the Quality Movement, said

"Quality comes not from inspection, but from improvement of the process."

Processes are improved through managing them well, not simply by doing inspections, and sampling. The management systems approach not only ensures that hazardous conditions are identified, but that their underlying causes are identified and corrected as well.

Definition of health

Health is a state of complete **physical**, **mental** and **social well-being** – not merely the absence of disease or frailty.

All ill health conditions should be taken seriously!

Occupational health management

The main aim of occupational health management is to prevent ill health – rather than to cure it!

The **OHSAct** prescribed the following:

Section 8: Employers:

"Every employer shall provide and maintain, as far as is reasonable practicable, a working environment that is safe and without risk to the health of his employees."

Section 14:

Employees must:

- Take reasonable care.
- Co-operate and obey lawful instructions.
- Report unsafe conditions.
- Report accidents.

The employer must consider the health risk employees might be exposed to and help to reduce these risks.

Employers should take the responsibility to ensure that they keep themselves in the best health possible.

If you take good care of your personal health; work with your employer; discuss the way you work, develop joint responsibilities and cooperate, it will all result in positive benefits to your health.

MHS Act Section 2

1) The employer of every mine that is worked must –

a) ensure, as far as is reasonably practicable, that the mine is designed, constructed and equipped:

- *to provide a healthy and safe working environment*
- *with a system of communication, and mechanical/electrical equipment that will serve this purpose*

(b) ensure, as far as is reasonably practicable, that the mine is commissioned, operated, maintained and decommissioned in such a way that employees can work without endangering the health and safety of themselves or any other person.

2) The employer must take reasonable steps to ensure that no-one is exposed to health and safety dangers at a mine that is not worked, but has not yet been issued with a closure certificate.

What can you do?

You can do the following to ensure that you are in the best health possible:

- Communicate any health concerns to your health and safety representative/immediate supervisor/manager.
- Report and describe all hazards/risks that you encounter.
- Assist in redesigning tasks that affect your health.
- In order to minimise the impact of work on your health you should:
  - Raise all concerns with your health and safety representative/ immediate supervisor/manager.
  - Check with your Doctor/site clinic when you suspect you may have any symptoms.

Remember – do not wait for increased damage to be certain of your symptoms before consulting a Doctor.

Types of health issues

Introduction

The principal health issues can be split into three separate groups, namely:

- Biological and chemical.
- Physical (ergonomic/manual handling), and
- Psychological.

Biological and chemical health issues

Exposure to hazardous substances can result in a variety of health problems.

These can include dermatitis (skin rashes), burns, etc. There are also long term effects that can prevent you from continuing work, for example, allergic asthma and dermatitis.

Some can also contribute to fatal illness, for example lung cancer.

Physical health issues

The effects of some physical hazards are often less evident in the short-term and may only become visible in the long term.

Physical hazards that you could be exposed to include:

- Injuries whilst handling, lifting and carrying.
- Noise and vibration.
- Heat exposure, for e.g. tunneling work.
- Radiation, for e.g. electric arc welding.
- Dust and fumes (could affect your breathing).

Psychological health issues

Emotional stress is the main problem when discussing psychological ill health. It can affect us all in one form or another.

Stress is a reaction that a person has to excessive pressure or other types of demand placed on him/her.

Pressure in itself is not necessarily bad – many people thrive on it. However, when pressure is experienced as excessive by a person that it can result in ill health.

If the employer and employee work together, problems regarding stress can be resolved.

Remember, you are responsible for your own body. If you do not look after it, it will not last you into old age.

Materials and their health implications

Materials/substances and where they are used	Health issues arising from using these materials
Asbestos, e.g. insulation board ceiling tiles and pipe lagging.	Pneumoconiosis, asbestosis, mesothelioma, lung cancer.
Carcinogenic materials, e.g. mineral oils, lubricants, asbestosis and PCBs (found in electrics).	Cancer, mesothelioma.
Corrosive materials, e.g. concrete, brick acid and wood dust.	Cancer of the nasal tract, chemical burns.
Skin sensitisers, irritants, e.g. bitumen, acids, alkalis and cement.	Dermatitis.

Contaminated land and materials, e.g. old buildings, redundant gas works.	Anthrax, tetanus, aspergillosis, psittacosis, poisoning, mycosis.
Respiratory irritants, e.g. adhesives, bitumen, solvents.	Asthma.
Sewage, e.g. dirty water	Leptospirosis (Weil's disease), hepatitis.
Silica-based products, e.g. granite kerbs, masonry, blockwork, fine aggregates.	Silicosis.
Lead, arsenic, solvents and PCB's found in redundant electrical apparatus.	Systemic poisoning.
Compressed air in sewers and tunnels.	Decompression illness.
Direct sunlight, e.g. when working outside, especially in unshaded areas such as on highways and when doing roofing work.	Sun burn, skin cancer.
Environments with limited lighting, e.g. tunneling.	Vision problems.
Hot environments, e.g. when roofing and using hot materials.	Heat exhaustion, heat cramps, heat rash, heat stroke.
Ionizing radiation, e.g. welding.	Radiation sickness, cancer and eye injuries.
Lifting, carrying or moving heavy tools or materials.	Work-related back pain and upper limb disorders.
Noisy environments	Noise-induced hearing loss.
Vibratory tools.	Hand arm vibration syndrome, e.g. vibration white finger.

Induction

It is vital that you attend an induction when you start at your workplace or if you are transferred to another department/site.

At the induction you will find out about your workplace's health and safety issues that you need to be aware of. The induction may also include practical training on the use of tools and equipment.

Remember, it is your health and therefor it is your duty to ask about training if you are unsure about any health issues.

If you have not been trained, you should not be doing the job.

Where you have a health issue that may affect you or your co-workers, make sure your health and safety representative/supervisor/manager are aware of your condition.

Health hazards - Definition

A hazard is something that has the potential to cause harm. This includes substances, machines and methods of work or other aspects of work organisation.

Health hazards

Remember, there are NO acceptable health hazards. In the majority of cases, by the time you start to feel ill, the damage has been done. It is therefore important to know the hazards

you could face at work, and be prepared to take control and prevent them from affecting your health.

The employer has a duty to protect your health and safety at work and you have a duty to protect your own health and safety.

Before you start your job, the identification of health hazards and risk assessments for all activities should be done. Information on risks should be made available to all employees before they start their work

PPE

Where health hazards have been identified and cannot be avoided, there is a range of suitable personal protective equipment (PPE) that you must wear to protect yourself from ill-health and injury.

Legislation requires that employers must provide suitable PPE to employees when they are exposed to health and safety risks at work.

All employees need to have and use the correct PPE. Make sure that you are using the correct PPE for the task.

First Aiders

It is also important that you know where you can find the first aider / first aid facilities. Normally this information is shared during induction.

The employer should ensure that there are adequate first aid facilities in the workplace by making an assessment of the hazards and risks and put together an appropriate level of first aid provision.

Make sure that you know where to get first aid when you are transferred to another department/site.

Occupational health staff

Some workplaces often have a range of health professionals who can give advice on work related health issues.

Depending on the size and nature of the workplace, the following health professionals could be available:

- Occupational health doctors and nurses: They can advise regarding work-related health problems and conduct health checks.

- Occupational Hygienists: They can assess the workplace for chemical, biological and physical health hazards.

- Ergonomists: They can provide practical advice regarding the design of work tasks to prevent and control work related health problems, for example task design, etc.

- Specialist engineering professionals: They can provide advice regarding noise, vibration etc. in the working environment.

Ensure that you know who they are and where to contact them.

Reporting ill health and accidents

Ensure that you report any:

- ill health
- accidents
- substandard work practices / workplaces, and
- hazards

to your health and safety representative/supervisor/manager as soon as they happen.

Ensure that you follow the correct reporting procedures.

Health screening

Some companies are introducing health screening as a way of identifying potential ill health problems at an early stage.

If this facility is available, ensure that you make use of it to keep you in good health.

Heath screening is a simple test to check the state of your health. Screening is done to:

- Protect the health of the prospective employee.
- Protect the health and safety of others.
- Protect the process (or product), and
- Enable management to make an informed decision about the suitability of the worker for the task.

It is important to be screened even if you do not think you have a health problem or if you are at risk of ill health. Screening has the potential to save lives and improve quality of life through early diagnosis of serious conditions.

Remember, screening can reduce the risk of developing a condition, but it CANNOT offer a guarantee of protection – that is up to you, working safely with your employer.

If you have any health problems, it is your responsibility to inform your immediate supervisor/manager of the problem.

You will be better respected and less likely to cause problems for yourself, your workmates or employer if you do this as soon as you are aware of a condition.

Example

At a large site over two thousand people who were to be employed in “safety critical” jobs were screened before they started work.

One in three workers was referred for treatment for a medical condition which was identified by the screening. Most of these were eyesight problems or high blood pressure, which was quickly treated allowing the worker to start without further delay.

Only four of the two thousand workers were found to have a medical condition serious enough to prevent them from starting work.

Health hazards in the workplace

In this section we are going to discuss hazards and factors that can affect your health in the workplace.

We are going to discuss:

- Hazards that can affect muscles and joints.
- Hazards that can affect the skin.
- Hazards that can affect breathing.
- Hazards that can affect eyes and vision
- Hazards that can affect ears and hearing.
- How the working environment can affect your health.
- How stress at work can affect your health, and
- How your life outside work can affect your health.

Hazards that can affect muscles and joints

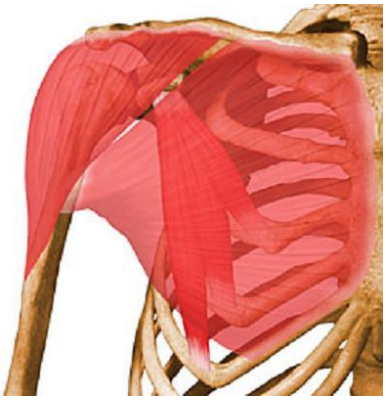
Introduction

One of the most common injuries in the workplace is sprains and strains of the muscles.

These injuries could be short-term, but could also cause long-term damage to the joints, bones and nerves.

These injuries often occur through constant use, resulting in wear and tear on the body.

These injuries are known as **musculoskeletal disorders (MDSs)**.



MDSs

MDSs affect the muscles, joints and tendons of the body. The most common areas that are affected are the:

- back,
- knees,
- neck, and
- shoulders.

The symptoms include pain, aching and discomfort.

By the time you become aware of the symptoms your body could be permanently damaged.

MDSs are also referred to as:

- Repetitive strain injuries (RSI).
- Work related upper limb disorders (WRULDs).
- Work related back pain.

MDSs can prevent you from physically doing your job or may even effect your future employment options.

It could also affect your life outside work, i.e. playing a sport.

Manual handling

In the workplace there are many times when you may be:

- lifting,
- carrying,
- moving,

- lowering,
- putting down,
- holding,
- pushing
- pulling
- restraining

equipment, products or tools.

This is known as **manual handling** and it implies dealing with materials or equipment using hand or body strength.

The equipment or materials being handled can be of different sizes, shapes and weight. Therefore, they need to be handled in different ways according to the task.

Examples of manual handling

Examples of manual handling include:

- Shovelling concrete.
- Pulling a level.
- Picking up boxes.
- Operating a power tool.

Risk of injury

If your job involves the following tasks, you are at risk of a possible injury:

- Repetitive lifting.
- Heavy lifting.
- Bending and twisting of the body.
- Frequent repetition of an action
- An uncomfortable working position.
- Exerting (applying) too much force.
- Working too long without breaks.

- Working in an uncomfortable environment (too hot or too cold).

You are more at risk of an injury if:

- It is a cold day.
- You are starting a new job.
- You have been away from work for 2 weeks or more.

You are also at risk when you:

- Are working under pressure, for example time pressure, and
- Do not report any symptoms immediately.

If you have an existing injury, for example from football, manual handling can worsen this injury. You may have to alter your working practice until you are fully recovered.

Signs that manual handling is affecting your health

The following are examples of possible signs to tell you that manual handling is affecting your health:

- Pain tingling or numbness.
- Shooting or stabbing pains,
- Swelling or inflammation.
- A burning sensation.
- Stiffness and aching.

Another sign is a bit of soreness in the affected areas of the body – especially at the end of a day. As time goes on, the aching usually worsens – especially if you are still doing the same tasks. The pain usually appears more often.

This discomfort gradually worsens until you cannot continue your job.

If you starting a new job that involves physical effort, you most probably will experience aches and pains. However, these should not continue. If they do, consult your Doctor or (if available) the site occupational health staff.

Prevention methods

Follow the do's and don'ts below to prevent manual handling from affecting your health.

Do
• Query the need for manual handling – avoid manual handling whenever possible. • Make use of manual handling equipment required for the job, i.e. hoists, mechanical lifting aids, etc. • Ensure your body is warm before you lift anything – this will reduce the risk of injury. • Plan for your lift – ask for help if you might need it and clear your path. • Use good manual handling techniques. • Split the load into smaller/lighter loads wherever possible. • Follow the advice that is provided to make the job safer. • Take regular breaks or rotate tasks if the work is repetitive. • Report any symptoms immediately. • Consult your health and safety representative/supervisor/manager if you experience any difficulties or discomfort.

Do not
• Twist or stoop the body when you lift. • Hold the load away from the body. • Carry loads over a long distance. • Move up and down different levels carrying loads. • Carry loads that make you off balance. • Move a heavy or awkward load. • Carry loads when you cannot see where you are going. • Continue to work in discomfort – develop improvements with your supervisor/manager. • Wait for increased damage to be certain of your symptoms before consulting a Doctor.

Working with vibration

Introduction

Vibration can affect your body while you are at work – especially when you are using high vibration tools for long periods. Such tasks can result in hand-arm vibration syndrome (HAVS).

Vibration can also affect one's health if it is present in the environment, for example, when driving a vehicle. Working in vibrating environments can result in whole body vibration (WBV).

Vibration can permanently alter the flow of blood around the body. If areas of the body do not receive a good blood supply, they can be damaged.

Any part of the body can be affected by vibration, but some of the most common parts to be affected include the:

- arms,
- hands, and
- back.

Risk of injury (HAVS)

You are at risk of a possible HAVS injury if you regularly use high vibration hand-held tools, for example, manual grinding tools, chainsaws, power hammers, etc.

The risk will increase when the equipment:

- Is used for long periods of time.
- Have high vibration levels.
- Causes you to get cold and wet when used.
- Have to be gripped tightly.
- Is uncomfortable to use.
- Is poorly maintained.

Risk of injury (WBV)

You are at risk of a possible WBV if your job involves driving construction vehicles, for example, fork lift trucks or earth-moving machinery.

Regular long term exposure to WBV is associated with back pain and other factors, for example poor posture and heavy lifting.

Signs that HAVS is affecting your health

The following are examples of possible signs to tell you that HAVS is affecting your health:

- You may start by having pins and needles and/or numbness in your fingers – especially at the end of a day.

- Problems with fingers during cold weather. You might find that the tips of your fingers go white, the fingers became pale and you lose the feeling in your fingers.

  When you return to a warm environment after being out in the cold, your hands may flush red and throb painfully.

Vibration can affect your nerves, muscles, bones and joints as well as your blood circulation.

- With time, the condition usually worsens – especially if you are still doing the same high vibration tasks. This usually means that the pins and needles/numbness happen more often and more severely – not just after a days work or when working in the cold. Attacks may start to occur when working in warm environments.

- Because you cannot feel your fingers very well, you lose your nimble fingers and may not be able to do many tasks – putting your job at risk.

- The worst case scenario is that your hands may become like sausages – poorly coordinated, clumsy, with frequent attacks of white finger – causing great discomfort.

  Vibration white finger (VWF) is a typical example of HAVS. VWF is provoked by the hands being cold. Once rewarmed some discomfort may occur as the blood circulation returns.

Prevention methods

Follow the do's and don'ts below to prevent vibration from affecting your health.

Do

• Review the need for vibration exposure with your supervisor/ manager.
• Inform the health and safety representative/supervisor/manager if equipment is faulty – this could result in greater levels of vibration.
• Take regular breaks or rotate tasks if the work is repetitive.
• Use low vibration tools or tools with low vibration handles where possible.
• Try to keep the hands and body warm. This helps to keep a god flow of blood moving around the body and lower the changes of an injury occurring. You can keep yourself warm by:
  ◦ Wearing gloves (protection and warmth).
  ◦ Using heating pads.
  ◦ Sing tools with heated handles.
  ◦ Wearing warm weatherproof clothing.
  ◦ Doing warm-up exercises before starting the job.
  ◦ Using a warm, sheltered area when you take breaks.
  ◦ Exercising and rubbing the hands and fingers during breaks.
• Avoid smoking – it has an effect on the blood flow and combined with vibration is not healthy.
• Consult our health and safety representative/supervisor/manager if you experience any difficulties or discomfort.
• Report any ill health immediately.

Do not
• Use vibrating tools and equipment for long periods – take regular breaks. • Use vibration tools for long shifts – your supervisor/manager should inform you of the safe "trigger time" for each tool. • Continue to work in discomfort – develop improvements with your supervisor. • Wait for increased damage to be certain of your symptoms before going to the Doctor.

Hazards that can affect the skin

Introduction

In your workplace, your skin may be exposed to harmful substances, activities or environments.

Some of the problems could be:

- Work related skin complaints, for example dermatitis, burns from working with cement.
- Diseases caused by exposure to ultraviolet light, for example skin cancer, sun burn.
- Diseases caused by exposure to radiation, for example burns, cancer.
- Infections spread by contact with the skin, for example tetanus, Weil's disease.

Work related skin complaints

Work related skin complains are caused by exposure to various substances, activities or environments that contain irritants.

The most commonly affected area is the skin on the hands, but the skin on the face, neck, chest, arms and legs can also be affected.

Risk of work related skin complaints

You are at risk of work related skin complaints if you are:

- Working with concrete, oils or solvents, plaster, epoxy resins, insulation, paint, machinery or any other job where you are exposed to dust, chemicals or contaminants.
- Working in trenches – you may be exposed to infected water and contaminants resulting in disease or skin infections.
- Cleaning or collecting waste – you may be exposed to contaminants.

You are even more at risk if your skin is exposed to weather elements. Sun, wind and rain damage the thin top layer of skin, leaving the underlying skin more prone to access by irritants such as cement, oil, detergents, etc.

These all depend on the strength of the contaminant, the length of time the skin is in contact and the sensitivity of your skin.

Dermatitis

Introduction

The skin is the largest organ in the body. Day-to-day exposure to various chemical substances, dust, temperature extremes, etc. can reek havoc with any skin if the necessary precautions are not taken.

Types of dermatitis

There are two types of dermatitis, namely:

- Irritant contact (occupational) dermatitis, and
- Allergic contact dermatitis

Irritant contact (occupational) dermatitis

Irritant contact dermatitis is caused by contact with substances which cause irritation at the site of exposure. If exposure is prevented, then the symptoms will clear up.

Allergic contact dermatitis

Allergic contact dermatitis is more serious. The body becomes sensitised to the substance which triggers the dermatitis and the disease will be triggered by very small amounts of the substance. Allergic dermatitis can occur in other places on the body that did not come in contact with the allergy-causing material. Sufferers from allergic dermatitis caused by cement will often have to leave the industry.

Factors contributing to irritant contact dermatitis

Factors contributing to irritation include the:

- Chemical properties of the substances, i.e. it is an acid, an alkali or a salt).
- Amount and concentration of chemical coming in contact with the skin, and
- Length and frequency of the exposure.

The part of the body is another factor to consider. The penetration of substances varies over different body regions. Some substances penetrate the face and upper back more quickly than the arms.

Environmental factors also play a significant role. Hot, humid workplaces cause workers to sweat. Sweat can dissolve some types of industrial chemical powers that may come into contact with the skin. This increases the toxic or irritant effects of the chemicals, because solutions penetrate the skin more readily than solids.

Clothing soaked with irritants is another important factor. Cuts or skin injuries enable irritant substances to penetrate the skin more readily.

Occupations at risk

The table below lists examples of some occupations where irritant contact dermatitis has been seen. It also lists examples of workplace chemical that can cause irritant contact dermatitis. This is not a comprehensive lists as new materials and process can present workers with chemical exposures and risks that have not been experienced previously:

Irritants encountered in various occupations	
Condition	**Irritant**
Agricultural workers	Artificial fertilizers, disinfectants, pesticides, cleaners, gasoline, diesel oil, plants and grains.
Cabinet makers and carpenters	Glues, detergents, thinners, solvents, wood preservatives.
Hairdressers	Permanent wave solutions, shampoos, bleaching agents, wet work.
Mechanics	Oils, greases, gasoline, diesel fuel, cleaners, solvents.
Metal workers	Cutting oils, solvents, hand cleaners.
Plastics workers	Solvents, acids, styrene, oxidizing agents.
Tannery workers	Acids, alkalis, reducing and oxidizing agents, wet work.
Textile workers	Fibres, bleaching agents, solvents.

Signs to tell you there is a problem

The following signs will tell you that there is a problem:

- The skin may appear dry, red, sore and sometimes itchy. This reduces the skin's ability to be able to cope with the effects of chemicals, dusts, etc.
- Dermatitis may spread to other areas of the body – even if only one area of the body was originally affected.
- The outer layer of the skin may shrink and become brittle and crack.
- The cracks will eventually get deeper and start to bleed, which means that dust, chemicals and bacteria can get into the sensitive, underlying tissue. The skin can get very sore and inflamed.
- If the cracks become deeper, it could happen that substances could reach the internal organs, which can cause serious damage.

Prevention methods

Follow the do's below to prevent work related skin complaints.

Do

• Consider specifying alternative materials and methods to reduce the risk of skin damage.
• Use protection.
  • Wear gloves or other PPE.
  • Replace PPE that is worn, torn or damage and ensure it is kept clean.
  • Ensure that gloves fit properly (size, length and material, e.g. waterproof).
  • Cover any cuts or abrasions with a waterproof dressing before you start working.
• Avoid touching irritants – use tools or equipment to handle the substance.
• Keep the workplace, equipment PPE and clothing as clean as possible from contamination.
• Wash any contaminated skin immediately. Use specialist skin cleaners to remove oil and grease.
• Wash your hands after handling cement, chemicals, solvents, etc. Unwashed hands spread infection.
• Inform your health and safety representative/supervisor/manager immediately if you have any of the signs and symptoms described.

Ultraviolet radiation (UV)

Introduction

Ultraviolet radiation (UV) is given off by the sun. You are exposed to ultraviolet radiation when working in direct or reflected sunlight.

Risk of diseases caused by UV light

You are at risk of diseases caused by UV light when you:

- Are working outside in the sun. It could cause skin problems and reflected sunlight can also affect your vision. You may feel unwell, for example sunstroke.

- Using particular products. Some chemicals can increase your skin's sensitivity to the sun, e.g. wood preservatives. Sunburned skin is already damaged and chemicals can easily get through the top layer to the more sensitive underlying tissue.

- Are doing any electric arc welding – you are also exposed to other forms of radiation at the same time.

All of the above factors depend on the strength of the contaminant, the length of time the skin is exposed and the sensitivity of your skin.

Signs to tell you there is a problem

The following signs will tell you that there is a problem:

- The sun exposed skin may become red, feel tender and may develop blisters.
- You may experience feelings associated with heat stress, e.g. nausea, dizziness, headaches, etc.
- You may develop irregularities with moles or spots on the skin – these may indicate serious damage to the skin cells from direct exposure to sunlight. This could be a sign that you are developing skin cancer, which could result in death.

Prevention methods

Follow the do's below to prevent UV damage.

Do
• Protect your skin from the sun – even if it is a cloudy day, you are sill at risk. Protect your skin by covering it up (protective clothing), using sun cream with a high sun protection factor and wearing sunglasses to protect your eyes. • Avoid working in direct sunlight for long periods – especially between 11:00 and 14:00. • Protect your health by improving working methods with your supervisor/manager. • Consult your health and safety representative/supervisor/manager if you have any problems or concerns about your health.

Radiation

Introduction

Radiation is energy that is transmitted, emitted or absorbed in the form of particles or waves.

The larger the amount of radiation and the greater the length of time you are exposed, the more chance you have of developing radiation disease.

If you work in areas where you are exposed to high amounts of radiation, it can eventually kill you.

Risk of diseases caused by radiation

You are at risk of diseases caused by radiation when you are working:

- With external radiation sources, e.g. radiography.
- Near external radiation sources, e.g. if you go into unauthorised high risk areas.

Signs to tell you there is a problem

There are very few early warning signs of illness caused by radiation.

As the illness gets worse you may suffer from:

- Nausea.
- Vomiting and diarrhea.
- Exhaustion and fainting.
- Redness, tenderness and swelling of areas of the body.
- Hair loss.
- Ulcers in the mouth, throat and intestines.
- Bleeding from the nose, mouth and rectum.
- Sore skin, including open sores on the skin surface.

Prevention methods

Follow the do's and don'ts below to prevent radiation diseases:

Do
• Protect your health by improving working methods with your supervisor/manager. • If applicable, check with the radiation protection supervisor (RPS) before working near any radioactive sources. • Minimise damage to your health by seeking help for problems as soon as you are aware of any. • Consult your health and safety representative/supervisor/manager if you have any concerns about radiation affecting your health.
Do not
• Put yourself in a position where you might be exposed to radiation. • Cross a barrier displaying a trefoil. This warning sign is telling you that beyond it is an area of radiation and it is not safe to go past it.

Infections caught through skin contact

Introduction

Infections caught through the skin, e.g. tetanus or Weil's disease is often caused by exposure to dirty, infected water or tools

Risk of skin borne infections

You are at risk of skin borne infections when:

- Working anywhere on site, particularly in contaminated land or water, including if you are in contact with sharps and needles.
- Excavating near ditches or ponds.
- Working in sewers.
- Working in waste management.
- After heavy rain which has created movement of ground water.

Weil's disease

Weil's disease is caused by water that has been infected by bacteria in rats urine.

For example, water that has collected in the bottom of trenches may have become stagnant and infected.

To avoid problems, wear suitable PPE and wash any skin that has been in contact with the polluted environment. Thousands of people contract the infection every year, and most recover completely with treatment.

If untreated you may not survive the organ damage caused by the bacteria. The onset of symptoms is rapid, and in severe cases decline is also very quick.

Signs to tell you there is a problem

The following symptoms will tell you that there is a problem:

- Sudden high temperature.
- A “flu like” illness.
- Other symptoms that appear like:
  - Joint and muscle pain.
  - Conjunctivitis.
  - Eye infection.
  - Jaundice (liver problem).

People with poor kidney function or existing skin conditions, e.g. eczema, may be at a higher risk of getting such an infection.

Prevention methods

DO

• Keep clean – wash or shower thoroughly after working in stagnant or slow moving water and soil.
  • Wash your hands regularly – always before eating and drinking.
  • Avoid rubbing your face during work as bacteria can spread via the eyes, nose and mouth.
  • Wash and clean your clothes and PPE regularly.
• Cover up!
  • Cover cuts and grazes with waterproof plaster.
  • Wear PPE.
  • Ensure that gloves fit properly (size, length).
  • Keep PPE clean.
• Protect your health by improving working methods with your supervisor/manager.
• Consult your doctor if you experience any of the symptoms discussed.

- Consult your health and safety representative/supervisor/manager if you have any concerns about skin borne diseases affecting your health.

Hazards that can affect breathing

Introduction

There could be various occasions when you may be at risk of breathing in something that could harm your health in the workplace

Types of breathing hazards

The hazards could be dust or small particles of:

- Wood or cement dust.
- Glues and resins.
- Mineral fibre dust.
- Isocyanates (found in paints).
- Bird droppings.
- Solvents.
- Asbestos.
- Silica.

Below are examples of everyday hazards that could affect breathing:

- Woodwork.
- Insulating.
- Demolishing.
- Painting and removal of paint.
- Cutting/mixing concrete.
- Welding.
- Maintenance, etc.

Example

Cutting concrete kerbs and similar products creates large amounts of dust containing silica which can affect your breathing or cause silicosis. Water suppression should be fitted to the cutter to reduce the amount of dust in the air and the appropriate PPE should also be worn (dust mask and suitable gloves).

Signs to tell you there is a problem

The following signs will indicate that everyday breathing hazards are affecting your health:

- Bouts of coughing or wheezing and shortness of breath.
- A tight chest and difficult breathing.
- A runny/stuffy nose and frequent sneezing.
- Watery or itchy eyes and a tickly throat.

The above symptoms may happen more regularly, even when you are not exposed to these hazards.

You may also become more sensitive to other factors, which have rarely caused a problem before. This could include animal fur, smoking, pollution, etc. These initial signs may develop into full blown asthma attacks.

Prevention methods

Follow the do's below to prevent everyday hazards affecting your breathing:

Do
• Ensure that you know what you are working with. • Use the appropriate PPE. • Ensure that you have got the right PPE and that it is working properly. • Keep the workplace, equipment and PPE as clean as possible from dust and other contaminants. • Give up smoking if possible – smoking can make symptoms even worse. • Protect your health by improving working methods with your supervisor/manager. • Minimise damage to your healthy by informing the supervisor/manager/ health and safety representative if you have any signs or symptoms discussed above.

Silica

Introduction

Silica occurs as a natural part of many materials used in the construction industry. It may be present in:

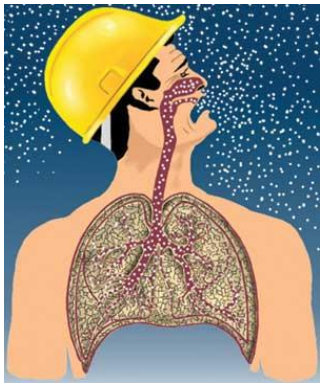
- Sand, sandstone and granite.

- Clay, shale and slate.
- Chalk, limestone and other rock.

Risk of silica-related diseases

Silica is present in many materials. The breathing in of silica dust can affect your health.

The following activities contains high levels of silica dust:



- Quarrying.
- Tunnelling.
- Grit or sand blasting.
- Demolishing.
- Scabbing, cutting or drilling any concrete products.

If you are a smoker, you are more at risk of being affected by silica dust.

Signs to tell you there is a problem

Normally there are not any early warning signs that you have been exposed to silica – expect an early death.

The problems appear gradually because there is a slow loss of lung tissue caused by damage from the silica. This affects one's ability to breathe. The situation gradually worsens and nothing can be done to help you. Normally the affected person dies at an early age due to heart failure.

The effects of silica are permanent and cannot be treated!

Prevention methods

Follow the do's and don'ts below to prevent silica-related diseases

Do
• Ensure that you are aware of all the precautions that you need to take if you are working with materials that contain silica. If you are uncertain, ask your supervisor/manager. • Ensure all control measures (e.g. ventilation, extraction) are working properly. • Ensure that PPE is worn correctly and that it fits properly. Replace the filter on face marks regularly and check before use. Wear suitable protective clothing, i.e. gloves and suitable overalls. • Ensure that the PPE is free from contamination, clean and in a good condition. • Use cutting tools fitted with water suppression to prevent the dust being created (ensure that there is water in the reservoir). • Ensure that you know what you are working with.

- Avoid creating dust.
- Keep the workplace, equipment and PPE as clean as possible from dust.
- Wash your hands and face before eating, drinking or smoking and before you leave the workplace.
- Inform your supervisor/manager/health and safety representative immediately if you think silica is present and adequate precautions are not being taken.

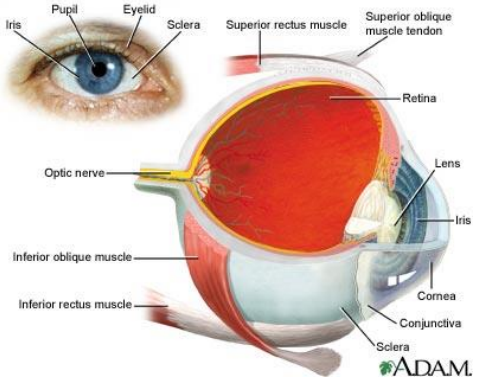
Do not
• Remove PPE whilst you are still in a contaminated area. • Allow the water reservoir to run dry on water suppressed tools. • Take PPE home to wash. • Continue to work if PPE becomes faulty.

Hazards that can affect your eyes and vision

Introduction

There are many hazards in the workplace that can affect your eyes and vision. Some example include:

- Nails, pieces of metal, splinters, etc.
- The mixing of cement, sawing, grinding, etc. creates dusts and grit.
- Chemicals and welding can burn the eyes.
- When working in bright sunlight, there is also a risk of damaging the eyes.
- Eyes can be strained when working with computer screens for long periods.



Eye injuries

Below are examples of eye injuries that could occur in the workplace:

- Scratches from a foreign body.

- Chemical splashes.
- Radiation burns from welding.
- Burns from looking into fibre optic cables, etc.

Risk of damaging your eyes

You are at risk when you are exposed to possible eye and face injury from:

- Flying objects, e.g. when using a nail gun.
- Liquid chemicals.
- Acids and caustic liquids.
- Chemical gases or vapour,
- Light radiation, e.g. from welding (arc eyes)
- Sparks, etc.

Signs to tell you there is a problem

The following might be signs that the eyes have been damaged:

- Sore, itchy, weeping or red eyes.
- Flashes of light in the eyes.
- Pain in the eye.
- If it feel as though something is in the eye (foreign body sensation).
- Ultra-sensitivity to light.
- A grey or white sore developing in the iris of the eye.
- Blurred or decreased vision.

Prevention methods

Follow the do's below to prevent eye problems:

Do

• Ensure that you are informed about all the precautions to be taken when you are working.
• Ensure eye protection is available and working properly. Use the eye protection provided in the workplace. Ensure eye protection is:
  • Worn correctly.
  • The correct size.

- Kept clean.
- Inspected regularly.
- Replaced if damaged.

- Ensure that you wear a clear, plastic face shield if you are:
  - Working with chemicals or metals that can splash.
  - Grinding or chipping.
  - Undertaking work where it is likely that there will be flying particles in the air.
  - Sandblasting.
- Inform your supervisor/manager/health and safety representative immediately if eye protection is unsuitable, not working properly or is not in full working order.

Eye problems

If you encounter any eye problems, following the guidelines bellow:

- If a dangerous or irritating chemical gets into the eye:
  - Rinse the eye for 15-20 minutes with flowing water.
  - If you are wearing contact lenses, remove it.
  - Obtain medical help as soon as possible.

- If something hits you in the eye:
  - Hold a cold compression over it but do not press on the eye (an ice cube in a plastic bag or clean cloth).
  - If pain continues and the vision is blurry, obtain medial help immediately.

- If the eye is hit with flying metal, wood or material from a power tool, or if the eye is cut or punctured:
  - Do not wash out the eye.
  - Do not push on the eye.
  - Do not try to remove the object that is stuck in the eye.
  - Obtain medical help immediately.

Hazards that can affect your ears and hearing

Introduction

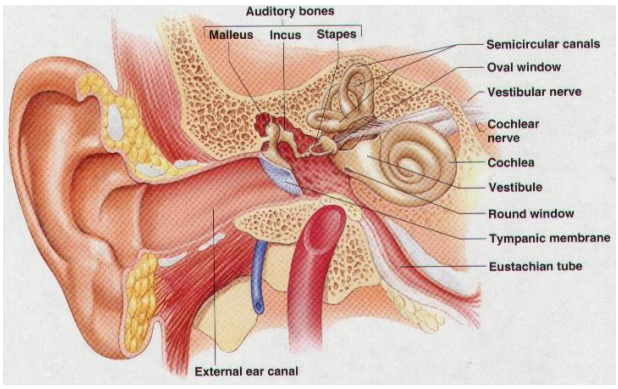
Noise at high levels results in damage to the inner part of the ear, which reduces one's hearing ability. Such damage is often irreversible.

The louder the noise and the longer it lasts, the more likely it is that damage will occur. Once a person's hearing is damaged, it usually cannot be fixed.

Damage to one's ears can result in two things, namely:

- Loss of hearing, and
- Loss of discrimination and contrast (even when people shout at you, you will not be able to hear them).

A major problem with hearing loss is that it gradually occurs over time, so that you may not be aware of it happening.



Risk of damaging your hearing

You know that the noise in the environment is at a danger level if you need to shout to be heard by another person who is standing 2 meters away from you. The following tasks may be a risk to your ears and hearing:

- Using drills and breakers.
- Operating plant machinery.
- Working near compressors and generators.
- Working in plant rooms, e.g. lift room, boiler room.
- Welding.
- Using woodwork machinery.
- Tightening bolts.
- Driving piles.

You are at risk of damaging your ears and hearing when you are exposed to either:

- Constant background noise in the work environment, e.g. machinery.
- Sudden loud noises (often of very sort duration), e.g. an explosion on a demolition site or short term use of powered tools.

Signs to tell you there is a problem

The following might be signs of hearing problems:

- A ringing in the ears after being in a noisy environment – your hearing ability might also be reduced. This may be temporary or permanent problem.
- Difficulty hearing sounds – especially other people talking. In speech, the letters b, k and t become particularly hard to hear.
- You may find it difficult to establish from which direction noises are coming.
- A constant ringing in the ears (called tinnitus).

- Disturbed sleep and feeling stressed.

There is no cure for noise-induced hearing loss!

Prevention methods

Follow the do's below to prevent damage to you hearing:

Do

• Where possible, swap jobs with other people (who are also trained in the particular task). This ensures that nobody is exposed to noise for long periods.
• Use the hearing protection (PPE) provided. Hearing protection should be:
  • Worn correctly.
  • The correct size.
  • Kept clean.
  • Inspected regularly.
  • Replaced if damaged.
  • Worn at all times.
• Inform your supervisor/manager/health and safety representative immediately if hearing protection is unsuitable, not working properly or is not in full working order.

How the working environment can affect your health

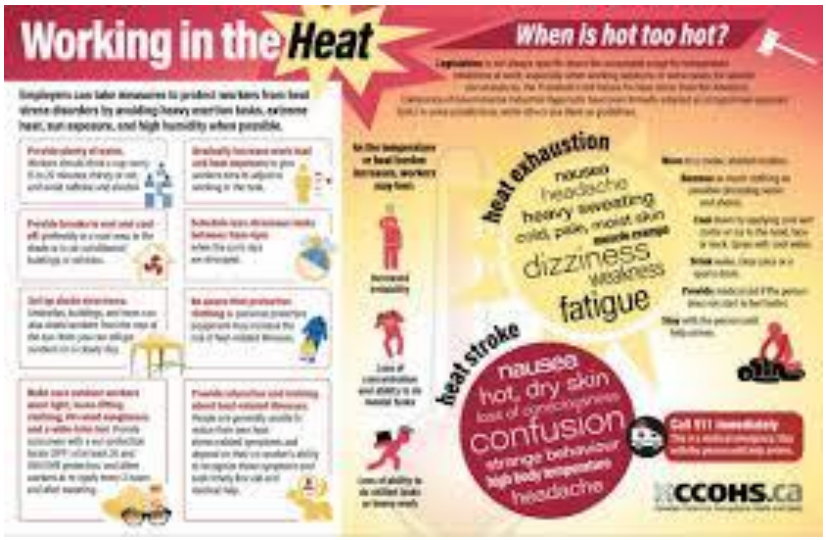
Introduction

The working environment can have a big impact on your health.

In this section we are going to discuss the:

- Temperature of your working environment (hot, cold, wet or damp conditions).
- Air pressure of the working environment (effects of working in confined spaces).
- Welfare facilities of the working environment.

Working in hot conditions



Introduction

Depending on your work environment your body may be exposed to heat or cold. This can put your body under strain.

Example

In **high temperatures** your body temperature and heart rate may rise to uncomfortably high levels – making you feel ill.

In cold temperatures, your muscles and joints can become cold. This makes them more likely to be damaged when put under stress, such as vibration.

Working in hot conditions

The body can be at risk of heat stress when working in hot conditions. This means that the body overheats. The body's core temperature as well as the temperature of the important internal organs increases to a dangerous level.

Risk of heat stress

You are at risk of heat stress when you are working in:

- An environment that has little ventilation and is so hot and humid that you cannot:
  - Work in the environment for a long period without becoming extremely uncomfortable.
  - Undertake your work properly.

- Direct sunlight for long periods.

Heat stress can also occur in colder temperatures if the work is so physical that it makes you very hot (especially if you are wearing heavy clothing.)

Signs to tell you there is a problem

The following might be signs of heat stress. You may:

- Feel thirsty, weak and tired and have a dry mouth.
- Suffer from a headache and your skin may become clammy.
- Experience feelings of giddiness, nausea, sweating and you may vomit.
- Painful muscle cramps after physical work.
- Suffer from a red, itchy heat rash.

In the worst case, you can suffer from delirium, aggressiveness, convulsions, unconsciousness and death.

Prevention methods

Follow the do's and don'ts below to prevent heat stress affecting your health

Do

• Drink lots of water when you get hot – even if you do not feel thirsty – your employer should provide a source of drinking water.
• Cool down by sponging yourself with cold water.
• Tale regular breaks. If possible these should be taken in a cool environment.
• Ensure you have a good rest at night in a cool environment (7-8 hours is needed by the average person).
• Wear appropriate clothing (PPE) for the task and the conditions.
  • Wear think PPE when dealing with conductive heat, e.g. metals.
  • Wear white or pale clothing when dealing with radiant heat, e.g. sunshine.
  • Wear minimal amounts of clothing when working in humid conditions, e.g. lightweight PPE.
• Protect your skin from the sun – even if it is a cloudy day.
• Avoid caffeine and alcohol as these will dehydrate you further.
• Avoid eating large meals when working in hot conditions – it could make you feel ill and puts extra strain on your body.
• Establish if it is possible to use air conditioning systems, fans or dehumidifiers to cool down your working environment.
• Inform your supervisor/manager/health and safety representative immediately if you experience any of the signs and symptoms discussed above.

Do not
• Work in hot environments for long periods and without drinking water regularly. • Work in the sun without protecting your skin. • Ignore the symptoms. • Suffer in silence.

Working in cold conditions

Introduction

Depending on your work environment your body may be exposed cold or damp conditions.

When working in cold conditions, the body can be at risk of cold stress, which means that the body gets too cold.

This can result in the body's core temperature, and the temperature of the important internal organs, decreasing to a dangerous level.

Risk of cold stress

You are at risk of cold stress when you are working in:

- An environment that has little heating and is so cold that you cannot:
  - Work in the environment for a long period without becoming extremely uncomfortable.
  - Undertake your work properly.
- The cold for long periods.

Signs to tell you there is a problem

The following might be signs of cold stress.

- A pale skin – white or blue in colour.
- Inability to carry out the work as quickly as possible due to cold limbs and lack of feeling.
- Painful muscle cramps after physical work.
- Cold fingers and toes which become numb.
- More frequent urination.
- Shivering.
- Hands and feet may eventually become frozen (an indication of frostbite).

- Worst case scenario – disorientation.

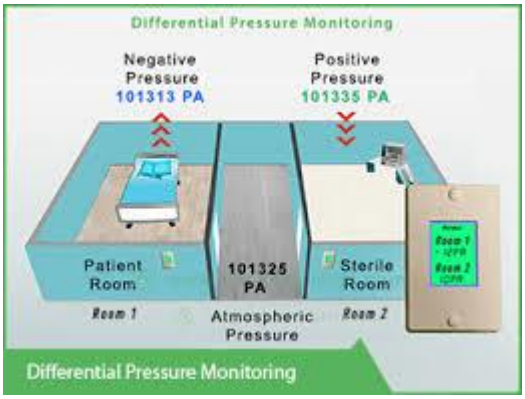
Prevention methods

Follow the do's and don'ts below to prevent cold stress affecting your health:

Do
• Wear a cap or hat underneath your safety helmet. • Take measures to avoid the chill factor, e.g. wear extra clothing. • Take regular breaks in a warm environment. • Wear appropriate PPE for the task and conditions. • Be alert to areas of whiteness on the face (especially the tip of the nose). • Go inside and get warm if signs of confusion appear. • Establish if it is possible to use hearing systems, e.g. fans to warm up the working environment. • Inform your supervisor/manager/health and safety representative immediately if you experience any of the signs and symptoms discussed above.

Do not
• Work without adequate PPE. • Work for long periods in cold environments. • Ignore the symptoms.

The air pressure of the working environment



Introduction

Depending on your work environment your body may also be exposed to higher levels of air pressure than usual. This can put your body under stress and cause a health problem known as **decompression illness**.

Risk of decompression illness

You are at risk of decompression illness:

- When you are working in a tunnel and breathing compressed air between 0.15 and 3.5 bar above normal pressure.

- During air range diving (inland, offshore, inshore).

- During mixed gas diving (mostly offshore).

Signs to tell you there is a problem

The following might be signs of decompression illness.

- The skin may become itchy or mottled in appearance.
- Pain in the joints – especially the knees and shoulders.
- Numbness, tingling, weakness or paralysis.
- Visual problems.
- Exceptional tiredness and general unwell feeling.
- Inability to control bladder and bowel movements.
- Worst case scenario – disorientation, convulsions and unconsciousness.

Prevention methods

Follow the do's and don'ts below to prevent decompression illness affecting your health:

Do
• Ensure that your medical/certificate of fitness is up-to-date. • Inform your supervisor/manager if you are suffering from seasickness, are dehydrated or are obese (before you start working). • Work out the time for which you are working at increased pressure and check your limits against the guideline. • Position air intakes to ensure they draw clean fresh air. • Keep air compressors well maintained. • Check the quality of the compressed air supply often to ensure it is suitable. • Inform your supervisor/manager/health and safety representative immediately if you experience any of the signs and symptoms discussed above.

Do not
• Work in environments of increased pressure unless you are qualified to do so. • Work in increased pressure environments when suffering from any ill-health. This is especially dangerous if you are suffering from nose or lung problems. • Position compressed air intakes near exhausts. • Ignore the symptoms.

Welfare facilities in the work environment

Introduction

Good health and welfare facilities in the workplace reduces health risks.

Legislation requires that the employer must provide suitable and sufficient facilities.

Welfare facilities include at least:

- Toilets.
- Washing facilities.
- Changing and rest areas.
- Drinking water.
- Eating facilities, etc.

Why welfare facilities are essential

As mentioned, good health and welfare facilities reduces health risks. For example:

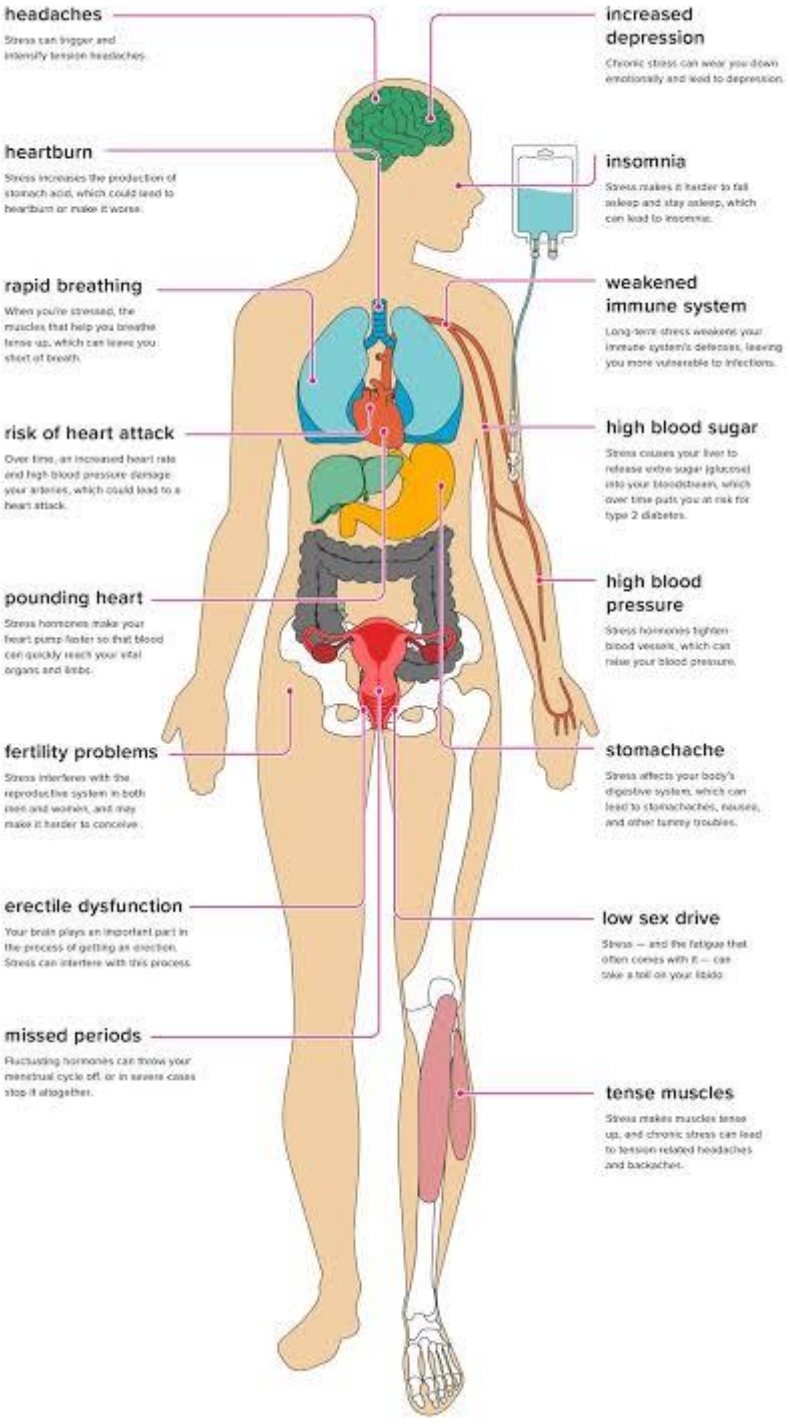
- If hands are washed regularly, the transmission of diseases can be reduced.
- Dermatitis can be reduced if the skin is cleaned after using harmful materials.
- If there are sufficient facilities to change into dry PPE, it reduces the changes of you catching a chill, etc.

Look after your welfare

You can do the following to look after your welfare:

Do
• Use the facilities provided. • Wear the appropriate PPE. • Ensure your PPE is clean and in a good condition. • Report any facilities that are not working properly.

How stress at work can affect your health



Introduction

Stress is a reaction a person has to excessive pressure or other types of demands.

Pressure in itself is not bad and many people thrive on it. However, ill health can result when pressure is excessive.

Stress can result from:

- Human factors.

- Social factors.
- Domestic factors, or
- Work factors.

Often these factors are interacting.

Work related stress

People experience work related stress if excessive pressure or other types of demands is placed on them in the workplace.

It is not an illness, but it can lead to increased problems with ill-health if it lasts for a long time or is particularly extreme.

Risk of suffering from stress

You can suffer from stress at any time. However, you may feel more "stressed" at times, for e.g. when you are under pressure from management or if you are working away from home.

Signs to tell you there is a problem

Stress can be noticeable in two ways, namely:

- Psychological effects
  - Anxiety, e.g. feelings of helplessness.
  - Depression.
  - Erratic behaviour.
  - Emotional outbursts.

- Physical effects
  - Heart disease e.g. stroke.
  - Back pain.
  - Gastrointestinal problems.
  - Minor health problems, e.g. eczema.
  - Breathlessness, e.g. panic attacks.
  - High blood pressure.
  - Loss of appetite.
  - Poor quality of sleep.

Reduce stress at work

You can do the following to **reduce stress at work**:

- Identify the problems and how they could be solved.

- Talk to your employer – if they do not know there is a problem, they cannot help.

- Support your colleagues if they are suffering from stress and encourage them to talk to the employer.

- Find out if your employer has a EAP (Employee Assistance Plan) and contact them for help.
- Speak to your Doctor if you are concerned about your health.

Inform your employer if there are any weaknesses in the health and safety programme that could contribute to your stress.

Reduce stress outside work

You can do the following to **reduce stress away from work**:

- Eat healthily.
- Stop smoking – it might be relaxing but it is bad for you health.
- Cut down on alcohol – it acts as a depressant and will not help.
- Cut down on caffeine – it can make you more nervous.
- Avoid illegal drugs – they make you feel even worse.
- Keep physically active – exercise motivates you and increases your energy levels.

How life outside work can affect your health

Introduction

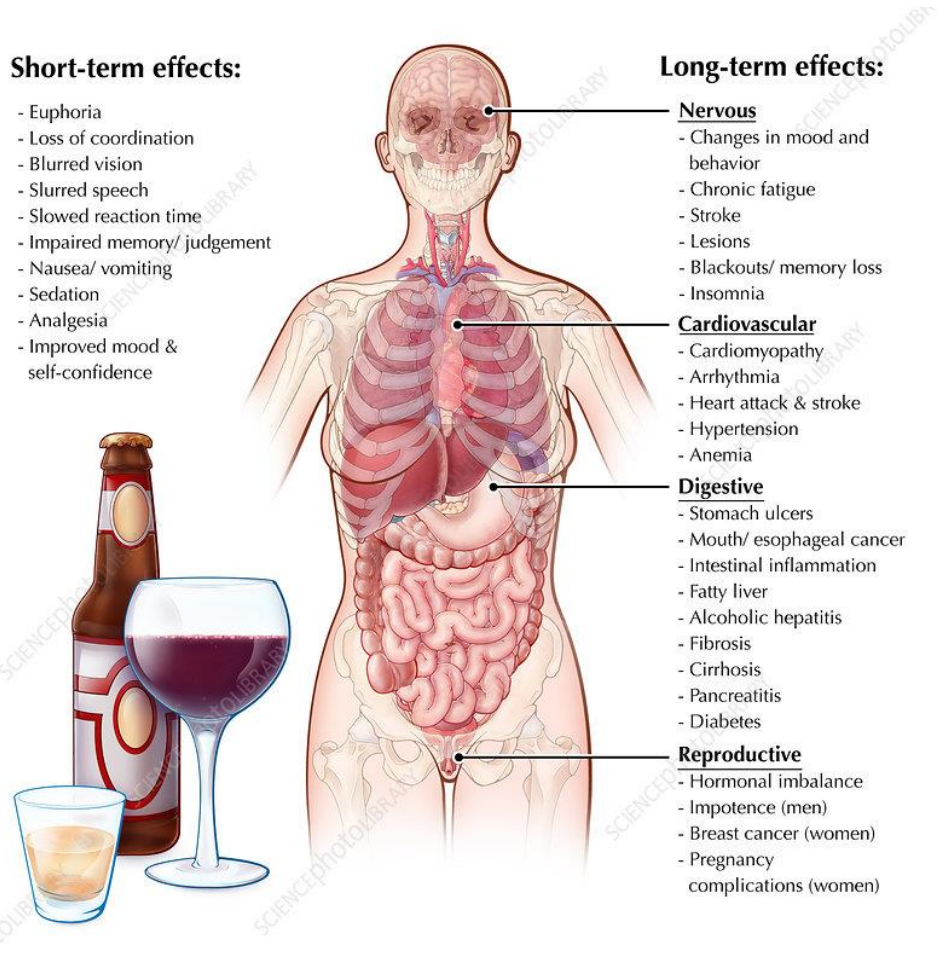
Every person has a right to live his/her life as he/she wishes outside work. However, remember that many activities that you do outside work can affect you health and therefore affect your work.

Common hazards to your health

Below are common hazards that could affect your health and well-being:

- **Smoking: Smoking reduces your physical fitness.** It also reduces the level of maximum lung function and makes you likely to cough, suffer from shortness of breath, wheezing and gasping.

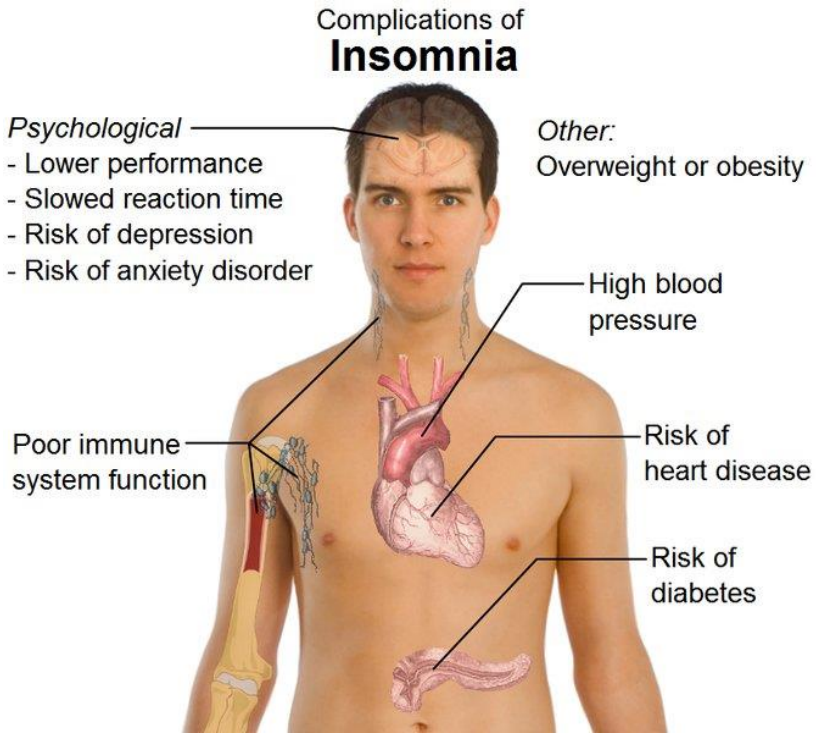
- **Consuming large amounts of alcohol:** This can lead to social or interpersonal problems. Alcohol affects many organs in the body, but most seriously affected are the central nervous system and the liver. Alcohol is a major cause of liver disease (cirrhosis).



- **Excessive noise:** Loud music can damage your hearing more than some types of noise at work (if you do not wear the necessary hearing protection).

- **Taking drugs (both prescribed and illegal):** Illegal drugs can contribute too many problems, e.g. poor health, violence, crime etc. Prescribed drugs may also sometimes affect you badly. Side effects could include dizziness, nausea, problems with vision, which could all affect your health and safety at work.

- **Irregular sleeping patterns:** Lack of sleep or poor quality of sleep can reduce your ability to recall information and to think clearly.

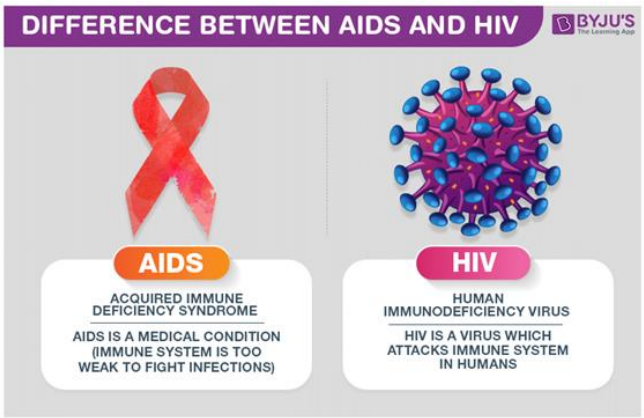


- **Irregular eating patterns/poor eating habits:** This could lead to illness and disorders. It is important to eat healthy and enough to restore the energy that the body has used, e.g. doing physical labour. By eating too much or too much of the wrong types of food can put a strain on your health.

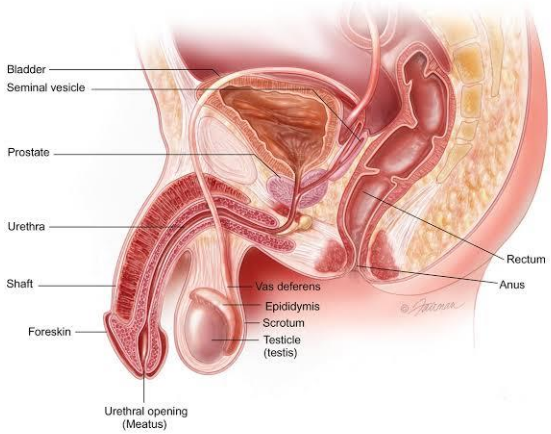
- **Injuries at home:** Most accidents happen in people's own homes. Many people over-estimate their ability to perform some tasks – they do not have the necessary knowledge or tools to perform the task and then accidents happen! These accidents can stop you from going to work for months.

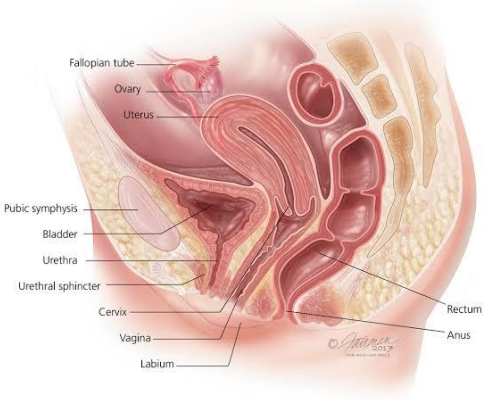
- **Sport injuries:** Sport injuries can be caused easily and can result in some serious physical injuries. Sport injuries may result in longer-term problems that could affect your ability to do your job.

- **Blood borne diseases**: HIV and Hepatitis B. HIV causes AIDS and there is no cure for AIDS. Hepatitis B could be caused by sharing a needle with an infected person.



- **Sexually transmitted infections (STIs):** Gonorrhoea and Herpes.





- **Overall fitness for work:** Your overall physical fitness and any emotional or psychological stress that you might have to cope with may also have an impact on your work.

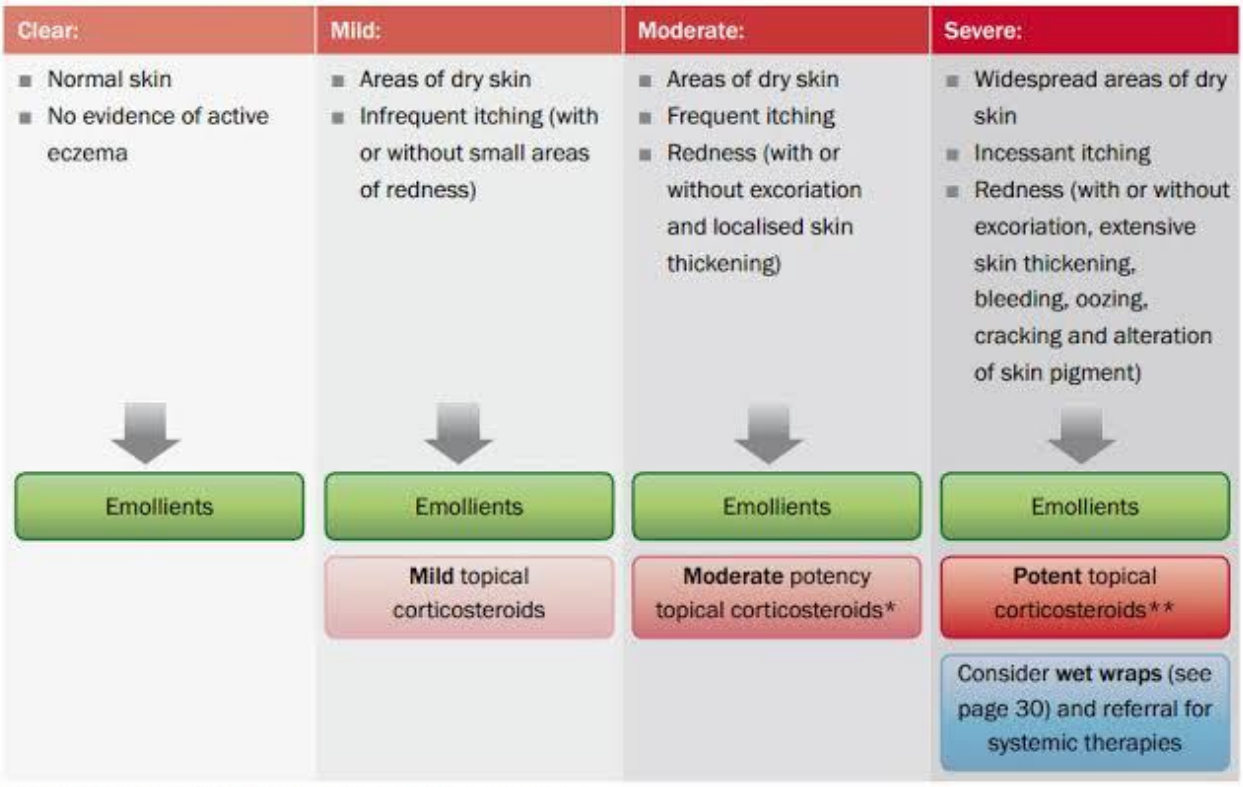
  Take special precautions if you have one of the following conditions:
  - Epilepsy.
  - Heart conditions.
  - Diabetes.

  If you suffer from one of the above conditions and you have it under control, you are capable of carrying out your job successfully.

  However, there can be implications for your safety and the safety of other people working with you if you job involves:
  - Working in confined spaces.
  - Working at heights, e.g. on scaffolding.
  - Operating heavy plant machinery.
  - Driving vehicles.

- **Sensitivity to materials at work:** You could be at risk from common materials used at work. E.g. if you have ever suffered from asthma, you may be more prone to develop breathing problems and you may be more prone to developing skin problems if you have ever suffered from eczema.

Eczema management algorithm adapted from NICE[5]



* Avoid use on face, neck, genitals or axillae for longer than 7–14 days

** Avoid use on face, neck, genitals or axillae

Thank You for choosing ISO NET for your Training Needs