



The E - Bulletin is a service provided from the in-house team of physicians (Specialists, GP's & the CEDARS Training Center) at the **CEDARS – Jebel Ali International Hospital** in order to raise awareness about health issues.

Heat Exposure

With the current temperatures firmly above 35 degrees Celcius for the coming months, it is time we look at the possible effects the sun and the heat have on our body again.

Sunburn

Sunburns give you discomfort, can lead to skin cancer later on and increase wrinkling of the skin.

The best way to prevent sunburn is to avoid sun exposure if possible. Stay out of the midday sun (from 10 in the morning to 4 in the afternoon), which is the strongest sunlight. Find shade if you need to be outdoors.

Other ways to protect yourself from the sun include:

- wearing protective clothing, such as:
 - Hats with wide 4 in. (10 cm) brims that cover your neck, ears, scalp and eyes.
 - Loose-fitting, tightly woven clothing that covers your arms and legs.
 - Clothing made with sun protective fabric. These clothes have a special label that tells you how effective they are in protecting your skin from ultraviolet rays.

- Sunscreen protection

If you can't avoid being in the sun, use a sunscreen to help protect your skin. Be sure to read the information on the sunscreen label about the SPF factor listed on the label and how much protection it gives your skin. Follow the directions on the label for applying the sunscreen so it is most effective in protecting your skin from the sun's ultraviolet rays.

Do not forget to protect your eyes from the extremely high UV index we experience here, always wear sunglasses. Long term exposure can lead to cataract.



Heat rashes



When you are working or exercising in a hot and humid environment, the most common problem you will experience is heat rash. It is caused by excessive sweating, with blocking of the sweat glands, and looks like a cluster of pimples or small blisters, red or pink-coloured. It can cause itching (prickly heat).

The most common areas for heat rashes are the neck, upper chest, elbow creases, the groin and buttocks and under the breasts.

Usually they will disappear by moving to a cooler area indoors, where you shower and carefully dry the affected area. If itching is very bad, you can use an anti-histamine tablet. Creams should not be used on heat rash since the moisture can make the rash worse.



Fatigue

Especially when driving in summer, you have to be aware of the tiring effect the heat has. Even in an air-conditioned car, the sun on the windscreen can cause diminished attention on the road. People also tend to get irritated more easily when in a hot environment. The combination of these two factors can create very dangerous situations on the roads. Stay well hydrated and take regular breaks when driving long distance to keep everybody safe on the roads!



Heat Illnesses

High temperature, especially in combination with humidity, stresses the body's ability to cool itself when working or exercising outside. This can lead to a range of heat illnesses that vary in seriousness.

Factors that increase the risk are:

- direct sun exposure
- limited air movement
- low fluid consumption
- physical exertion
- heavy personal protective clothing and equipment
- poor physical condition or health problems
- Pregnancy
- lack of recent exposure to hot conditions,
- age above 65 and a history of heat-related illness
- Some types of medication can also increase your sensitivity to heat.



Heat illnesses can also be caused by indoor industrial heat from ovens or furnaces

Heat Cramps

Heat cramps are muscle spasms which usually affect the arms, legs, or stomach. Frequently they don't occur until sometime later after work, at night, or when relaxing. Heat cramps are caused by heavy sweating that leads to loss of body salt and fluids. Although heat cramps can be quite painful, they usually don't result in permanent damage. To prevent them, drink water or electrolyte solutions throughout the day and eat regular snacks. Consult a doctor if the cramps don't subside within one hour.



Heat Exhaustion

Heat exhaustion is more serious than heat cramps. It occurs when the body's internal air-conditioning system is overworked, but hasn't completely shut down. In heat exhaustion, the surface blood vessels and capillaries which originally enlarged to cool the blood collapse from loss of body fluids and necessary minerals. This happens when you don't drink enough fluids to replace what you're sweating away.

The symptoms of heat exhaustion include: headache, heavy sweating, intense thirst, dizziness, fatigue, loss of coordination, nausea, irritability, tingling in hands or feet, anxiety, cool moist skin, weak and rapid pulse (120-200), and low to normal blood pressure.

Somebody suffering these symptoms should be moved to a cool location such as a shaded area or air-conditioned building. Have them lie down with their feet slightly elevated. Loosen their clothing, remove shoes and socks, apply cool, wet cloths to the head, neck and face or fan them. Have them drink small amounts of cool water or electrolyte drinks regularly. Try to cool them down, and have them checked by medical personnel. Victims of heat exhaustion should avoid strenuous activity for at least a day or 2, and they should continue to drink water to replace lost body fluids.



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Heat Stroke

Heat stroke is the most serious heat-related health problem and can result in death. It occurs when the body's temperature regulating system fails and the victim's body temperature rises to deadly levels. A heat stroke victim may first suffer heat cramps and/or the heat exhaustion before progressing into the heat stroke stage, but this is not always the case.

Sometimes heat stroke is mistaken for heart attack. It is therefore very important to be able to recognize the signs and symptoms of heat stroke - and to check for them anytime an employee collapses while working in a hot environment.



The early symptoms of heat stroke include a high body temperature; a distinct absence of sweating (usually); hot red or flushed dry skin; rapid pulse; difficulty breathing; constricted pupils; any/all the signs or symptoms of heat exhaustion such as dizziness, headache, nausea, vomiting, or confusion, but more severe; bizarre behavior; and high blood pressure. Advanced symptoms may be seizure or convulsions, collapse and loss of consciousness.

How to prevent heat illness when working outside:

If the work is new or you have taken a break more than 1 week: condition yourself for working in hot environments - start slowly then build up to more physical work. Allow your body to adjust over a few days.

Drink lots of liquids. Do not wait until you are thirsty, by then, there is a good chance you are already on your way to being dehydrated. Never drink alcohol and avoid caffeinated beverages. If you work outside, start your day by drinking up to 1 liter of water before you start your shift. As long as you stay active outside drink about 1 glass of cool water every 15 to 20 minutes. Check that your urine stays clear or lightly coloured.

Take a break if you notice you are getting a headache or you start feeling overheated. If symptoms persist, call your supervisor or company nurse. ❖



It is vital to lower a heat stroke victim's body temperature. Seconds count. Pour water on them, fan them, apply cold packs all over the body. Call 999 and get an ambulance on the way as soon as possible.

Medical Consultant for June 2014



Dr. Marian MJ Leys
Occupational Health Physician

Dr. Marian Melanie Jan Leys has more than 5 years of experience as a consultant for Occupational Medicine for a variety of clients in industry and government in Belgium.

Her responsibility involves inspection visits to workplace, risk analysis and development of medical prevention programs according to the companies, research and statistical analysis of work related risk, implementation of vaccination programs and tuberculosis screening programs, diagnosis of work-related pathology, evaluation of fitness to work of employees and advice on the use of collective and personal protection.

She graduated Cum Laude of Master in Medicine from KUL University Leuven, Belgium and pursued Master after Master in Occupational Medicine at School of Public Health, KUL, Belgium also graduating as Cum Laude.

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