

Health Risks from Working Outdoors:

There are several health hazards which may affect people who work outdoors. Some of the main hazards which people may be exposed to include:

Exposure to UV radiation from the sun:

UV radiation from the sun causes damage to skin. The main effects include sunburn, blistering, skin ageing, and in the long term may lead to skin cancer. Skin cancer is the most common form of cancer in the UK, with over 40,000 new cases diagnosed each year.

There are three main types of skin cancer:

1. Basal cell carcinoma (rodent ulcer)

This type of cancer is usually found in people over 60. It is often linked with years of working outdoors, outdoor sports, or life in the tropics. The most likely sites are on the face and hair bearing skin. Appearance may vary, but there is often a nodule which slowly grows to 0.5cm over a couple of years. It may look translucent or pigmented, and may develop a raised pearly border with a non-healing ulcer in the centre. This type of cancer does not usually spread to form secondary cancers, however early treatment is vital to prevent extensive tissue damage around the site of the cancer.

2. Squamous cell carcinoma

This type of skin cancer mainly occurs in older people usually following long exposure to UV radiation as in outdoor work. Appearance is usually of a warty lump, nodule, ulcer, or sore which does not heal. Squamous cell carcinomas also have a very high cure rate, but early treatment is vital in order to prevent tissue damage.

3. Malignant melanoma

The incidence of malignant melanoma is increasing in Britain, and the rest of the world, although it is still much rarer than the other types of skin cancer. If untreated malignant melanoma spreads to other organs, however if it is diagnosed and treated early there is a very good chance of a cure. Most melanomas start on a pigmented area of skin. You should seek medical advice if a mole:

- Is getting larger or a new one is growing
- Has an irregular outline
- Has a mixture of different shades of brown or black
- Is bigger than the blunt end of a pencil (7mm)
- Has an inflamed or reddish edge
- Is bleeding, oozing or crusting

- Starts to feel itchy or painful

Who is at risk?

Anyone whose work involves a lot of time spent outside is potentially at risk. Some skin types are more prone to skin cancer than others. People with white skin are at most risk and in particular those who have:

- Fair or freckled skin which doesn't tan, or goes red or burns before tanning
- Red or fair hair and light coloured eyes
- A large amount of moles (over 100 in young people, or over 50 in older people)

How to protect yourself.

It is important to remember that you can still burn, even if you already have a tan, and even if it does not feel very hot and is overcast and windy. To protect yourself from the harmful UV radiation from the sun it is important to:

- Wear clothing which acts as a physical barrier to the sun's harmful rays. Tightly woven clothing gives the best protection.
- Wear a hat, especially one with a brim or flap which covers the ears and the back of the neck, as these are areas which often get sunburnt.
- Protect exposed skin with sunscreen. Use a sunscreen with a sun protection factor (SPF) of at least 15. Reapply regularly as directed, and especially if sweating.
- Take breaks in the shade.
- Check your skin regularly for any unusual spots or moles, and see a doctor promptly if you find any which are changing in size, shape or colour, or is itching or bleeding. Tell your doctor that you work outdoors.

Sources of Guidance and Advice:

- Keep your top on: Health risks from working in the sun (HSE)
<http://www.hse.gov.uk/pubns/indg147.pdf>

Dehydration:

Especially during warm weather, people involved in physical work outdoors may be at risk from dehydration. It is important to drink plenty of fluids, preferably water, to avoid dehydration. It is best to avoid drinks such as tea, coffee and cola as the caffeine in these can increase the effects of dehydration.

Insect bites and stings:

People working outdoors may be at risk from bee and wasp stings. Usually an initial sharp pain is followed by mild swelling and soreness which is usually relieved by first aid measures. For a sting in the skin:

- Remove the sting from the skin if still embedded. Pluck it out with fine tweezers, holding below the poison sack and as close to the skin as possible.
- Apply a cold compress to the area (do not apply ice directly to the skin as it may cause an ice burn).
- Advise the individual to see their doctor if the pain and swelling persists.
- For a sting in the mouth, give the individual some ice to suck or cold water to sip to minimise the swelling, and seek medical aid.
- Multiple stings can be dangerous so it may be necessary to dial 999 for an ambulance (2222 if using the University switchboard).
- Some people are allergic to stings and may develop the serious condition of anaphylactic shock. Dial 999 (or 2222 through University switchboard) immediately, and summon a first aider.

Tick bites

Ticks are tiny, spider-like creatures found in grass or woodland. They attach themselves to passing animals, including people, and bite into the skin to suck the blood. It is difficult to see an unfed tick, but following feeding a tick can swell to the size of a pea. Ticks can carry disease, such as Lyme disease and cause infection, and should therefore be removed as soon as possible.

To remove a tick:

- Use fine pointed tweezers and grasp the tick's head as close to the individual's skin as possible
- Use a slight to and fro action to lever, rather than pull, the head out.
- The mouthparts will be firmly embedded in the skin, so try to avoid breaking the tick and leaving the head buried in the individual's skin.

Advice for employees to prevent the risk of Lyme disease:

Lyme disease is an infection transmitted by the bite of the tick, which is thought to live on deer, wild rodent and working dogs. Those working in Scotland in ground vegetation are particularly at risk and should:

- Cover exposed areas such as legs with trousers which are closed at the bottom
- Inspect your skin for ticks
- Report any flu like symptom or sign of expanding red ring developing around the site of a bite to your GP.

Lyme disease is treatable with antibiotics.