

Emergency Procedures and First Aid

Burns:

In severe cases summon medical attention (by ambulance) immediately. Flush affected areas of the skin with copious quantities of tepid water (around 40° C, but NOT MORE THAN 45° C) to reduce freezing of the tissue. However, a large burn when warmed up will cause the casualty much distress and the casualty will require powerful pain relief. If there is likely to be a delay in transport to the hospital, then allow the burn to warm up more slowly.

Loosen any clothing that may restrict the circulation of the blood. Do not apply heat to the affected parts, but keep the casualty warm. Cryogenic burns will swell and are very prone to infection. Protect the burned area from infection or further injury.

The casualty department may not have treated a liquid nitrogen burn before. Take the MSDS detailing the medical treatment required with the casualty to the hospital.

Large Spills of Liquid Nitrogen:

Do not enter the 'fog' caused by large liquid nitrogen spills, the oxygen concentration in the fog may be well below that of normal air.

Large spills out of doors should be dispersed with water, to increase the rate of vaporisation. If a vehicle has been involved, do not move it until the tyres are warm again.

For a large spill inside a building the area must be evacuated. It may not be appropriate to use the fire bell to do this, since people may enter the danger area on their way out. Move away from the danger area and call on the assistance of colleagues, using oxygen meters to protect yourselves, then call for help from the Safety Officer, or at night initially from the Security Staff. Ensure that they know the danger of asphyxiation and are wearing their oxygen meters.

Asphyxiation:

Once successfully rescued, treat as for any unconscious casualty – give artificial ventilation.

Note – attempts to rescue someone who has been overcome, without the correct equipment and training, are almost certain to end with additional casualties. DON'T DO IT. To be effective in any way you must minimise the risk to yourself.