

• *Gloves*

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Gloves are a form of personal protective equipment. They should therefore be provided free of charge, and must be suitable for their purpose.

However what a lot of people forget is that Protective Equipment should be used only as a last resort and only after the employer has looked at removing the hazard, substitution (i.e. replacing it with a safer alternative), and other methods of control. Only after all of these have been considered and implemented should gloves be considered.

In practice gloves can be a very useful piece of safety equipment where work involves sharp objects, chemical or biological hazards, wet, cold or hot work. Unfortunately many gloves are inappropriate for their purpose, and some introduce new hazards.

This briefing is intended to alert branches to some of the issues that they should consider where gloves are concerned.

THE CORRECT GLOVE

Gloves should be the right size and the right type for the work involved. There are thousands of different gloves on the market. The list below covers a few of the main types:

- Disposable latex gloves are often used by nurses, laboratory workers, and first-aiders. They are made from natural rubber and are a major cause of allergic contact dermatitis. The allergy is triggered by a protein in the latex. Someone can use these gloves for years and then suddenly develop an allergy. This means that they could then get a reaction whenever they touch rubber. In extreme cases, the person can react so strongly that they fall unconscious. High quality gloves are processed to reduce the levels of protein. Cheaper gloves are usually a greater danger. Manufacturers should be asked to give information on the levels of free protein in their products.
- Powdered latex gloves are by far the most dangerous. They contain corn starch which binds to the protein making it more easily absorbed. Also the dust, if breathed in, can cause asthma. UNISON believes that these gloves should never be used.
- Disposable latex gloves should only be used as a temporary barrier against infection as oils and solvents quickly weaken them. They also puncture easily.
- Flock lined rubber gloves are fine if used with detergents or water for cleaning. If mild solvents are used then nitrile rubber should be used.

- Cotton lined PVC gloves are used as protection against splinters, sharp edges, and wet objects. They are used in some refuse collection, grounds maintenance, and amenity horticulture work. They do not give sufficient protection against sharps, where stronger gloves are needed
- Viton rubber gloves are often used when dealing with solvents. However they are not intended for general use when handling these chemicals, and are for splash protection only.
- Specialist gloves. There are a variety available, including chain mail gloves, polyurethane, and cushioned gloves. These usually have a very particular role, such as preventing static, or reducing the effects of vibration. However, if any of them are being used, UNISON branches should always check to see if the hazard can be removed, substituted, or controlled by other means beforehand.

FAILURE

Gloves fail for a variety of reasons. One of the other reasons gloves fail is that people are not told how to use them. Few employers will provide training in correct technique, despite it being a legal requirement. This means that gloves are often taken off, cleaned, or stored incorrectly, so that the skin can become contaminated or the hazard can get inside the glove. In addition, gloves are often used for the wrong purpose.

Pin-prick holes are quite common in all latex gloves. Simply blowing a glove up will not necessarily show that the glove is damaged enough to let in a virus. This is why gloves alone are not sufficient protection.

Oil-based substances and hydrocarbon solvents weaken latex very quickly. This damage cannot be seen, and so unsuitable gloves will give a false sense of security. Many chemicals can actually work their way through a glove by permeation.

Lined gloves may seem safer, but these are usually made by dipping a cotton glove in rubber or PVC. This means the coating is uneven and, on occasion, the fibres may show up on the surface of the glove making it useless as a barrier to chemicals. Separate cotton linings worn underneath the glove are a much better idea, so long as they are changed regularly.

WHAT BRANCHES CAN DO

First, ask why are gloves being used? Have all other controls been considered? Are they a final line of defence only?

Secondly, are they the right gloves? There is a European standard (EN374-3) on protective gloves, and all gloves sold in the UK must meet this standard. It gives six classes of protection. Make sure that the gloves used are suitable for the purpose they are being used for.

If latex gloves are being used, do they have the lowest total free protein levels available, and are they unpowdered? Are non-latex gloves available if required? Note that some other substances found in gloves, such as thiurams and dithiocarbamates can also act as sensitisers.