# During Spraying

# Hand Protection



#### Hand Protection

- Keep all chemicals away from the skin, even if they are thought to be harmless. When using pesticides protect yourself by adopting clean working practices. Do not contaminate skin, clothing, equipment or the working environment. Always read the label before using pesticides and check for specific advice on protective clothing.
- Reduce the risk of exposure wherever possible; use engineering controls such as closed transfer systems and maintain sprayers correctly to avoid leaks.
- Gloves must be worn when handling concentrated pesticides, especially those which
  carry any hazard symbol. They may also be needed when mixing and applying diluted
  pesticides, particularly when handling contaminated equipment, also when using handheld equipment or when applying reduced volumes.
- Wash chemicals off the skin immediately with plenty of soapy water. Do not scrub your hands as this removes the protective layers of the skin. After washing dab your hands dry with a dry towel and apply hand cream to replace natural greases.
- Always wash hands and exposed skin before eating, drinking, smoking, using the toilet and after work.
- Keep sufficient water, soap and towels available nearby whilst working with chemicals.
- Keep cuts and abrasions covered with a waterproof dressing. Change dressing for a porous one after work.

#### **PPE - Best Practice**

When handling undiluted pesticides wear the following as a minimum:

- coveralls
- •a face shield
- •an impervious apron
- •boots and gloves.

#### Gloves

Gloves are valuable protective devices but do not give absolute protection. Their effectiveness depends on how they are chosen, put on, used, taken off and stored.

Not all gloves protect against all materials. Their performance depends on their quality, the thickness of the material and the glove design, material and construction. The type of chemical, degree of exposure and maintenance of the gloves all affect the degree of protection.

#### Choosing Protective Gloves

Independent trials using typical solvents found in pesticides suggest that **nitrile** gloves offer suitable protection. Whichever nitrile glove type is chosen, ensure it has a minimum thickness of 0.5mm and 300mm length to protect wrists.

Other thicker materials may offer satisfactory protection but are not so easy to use. Remember that glove specifications can change from time to time. For up-to-date information, contact your glove supplier or manufacturer direct.

#### Glove Use and Maintenance

 Before use, check your glove for any visible weakness such as lumps, pinholes and thin patches. You should also test for leaks. The illustration below shows how to test for leaks without contaminating your mouth.

doubt, do not use the gloves, get a new pair.

- Minimise contact between your glove and the chemical and avoid total immersion if possible.
- 3. Contaminated gloves should be washed as soon as possible in water. Always wash gloves before removal. Washings should be added to the spray tank.
- Do not keep used gloves for long periods as chemicals can be absorbed into the glove and eventually permeate through to the inner surface whether the glove is being worn or not.
- 5. If the glove is contaminated, looks dirty, smells of chemical, or if you are unsure about its protective qualities, then dispose of it safely via a reputable waste disposal contractor.
- 6. Ensure that chemicals do not contaminate wrists via the cuff. Armlets help to prevent this. Contamination on the inside of the glove can readily be absorbed by the skin.



#### Over or Under?

The operator should assess the risks and how to obtain the greatest protection and minimise the chance of contaminating the skin before deciding how to wear PPE. General advice is:

**Gloves over coverall** - if the arm is raised when spraying.

Gloves under coverall - if the arm is lowered when spraying or large volumes of spray solution are likely to reach the arm.

## **Hand Protection**

### Removal of gloves

Gloves should be washed whilst still on your hands and dried on a disposal towel before removal. Take care not to contaminate your hands when removing your gloves.

1. Pull one glove off half way.



With hand still in first glove pull the other glove off the hand as far as the wrist.



3. Put ungloved thumb inside top of second glove



4. Lift hand out and hold gloves by inside surfaces only



## Storage and disposal of gloves

When gloves have been removed, in all cases your hands should be washed again with soap and water and dried well. Hand cream should be applied.

Gloves should not be stored where they are likely to become contaminated. During fieldwork gloves should be kept in a PPE locker or a suitable container on the vehicle. An extra pair may be kept on the tractor for handling blocked nozzles.

Do not wear gloves used for handling chemicals when driving a vehicle; they may spread contamination onto equipment and could be punctured by the machinery.

Dispose of gloves as contaminated waste through a reputable waste disposal contractor use **www.wastedirectory.org.uk** For more advice use the EA's agricultural waste help-line on 0845 603 3113

For details of glove and PPE suppliers contact the Personal Safety Manufacturers Association (PSMA) who are part of the British Safety Industry Federation (BSIF) www.bsif.co.uk.

**REMEMBER** Gloves are to protect your hands from accidental contamination; wearing gloves does not mean you should allow your gloved hands to become contaminated.



This Guide is produced by the Crop Protection Association and has been updated as part of The Voluntary Initiative.

The Voluntary Initiative is a programme of measure agreed by Government to minimise the environmental impact of pesticides.

www.cropprotection.org.uk

www.voluntaryinitiative.org.uk

