



Bee stings and how to deal with them

Advisory Leaflet No: 7

When a honey bee stings a person, the sting, venom sack and venom pump are left behind in the skin when the bee pulls away. This ruptures the bee's abdomen and it dies shortly afterwards.

Most of the venom will be injected in the first 20 seconds but the pump can continue for up to two minutes. It is important to get the sting out as quickly as possible in order to minimise the amount of venom injected. Over the years various methods have been recommended for removing bee stings but research has consistently shown that the method used has little material effect on the end result. The crucial factor is to get the sting out quickly.

Probably the best method is to scratch out the sting using a fingernail or hive tool and then to smoke the area to mask the alarm pheromone in the sting to stop more bees from stinging in the same spot.

Occasionally bees will sting through a bee suit or gloves. In these instances rub the affected area through the clothing to dislodge the sting, smoke the area and remove the sting from the clothing.

Applying witch hazel, calamine lotion or bicarbonate of soda solution will all act as soothing agents and an ice pack, or pack of frozen peas, will help to reduce any subsequent pain or swelling resulting from the sting.

If stung, care should be taken to avoid additional injuries caused by such things as dropping heavy supers on feet!

Some beekeepers have very little reaction to bee stings and prefer to work with little or no protection. Whilst there may well be valid reasons for working without gloves, for example when carrying out delicate tasks such as queen marking, working without a veil carries serious potential risks and should not be chanced.

Beginners should always wear full protective clothing whilst gaining experience and confidence, and finding out how they react to bee stings.

There is a belief amongst some beekeepers that getting stung several times a year helps to build up an immunity to stings and protection against arthritis and rheumatism. These beliefs are debatable.



Around one fifth of beekeepers have some allergic reaction to bee stings. Reactions can range from slight swelling and itching in the area of the sting to generalised itching or anaphylaxis (generalised shock including breathing difficulties). People who are very allergic to bee stings should take care when working with bees to ensure that they do not get stung. Adequate preparations for a possible emergency should be made in advance and the risks involved in working alone carefully evaluated.

Unfortunately, even beekeepers that normally show little reaction to bee stings may suffer a serious reaction next time they are stung. Being prepared by ensuring that help can be called quickly in an emergency is always a wise precaution.

The risk of being stung can be greatly reduced by:

- having gentle bees,
- choosing appropriate times and weather conditions for opening hives
- using smoke correctly
- gentle handling
- washing bee suits and gloves frequently to remove any residual sting pheromone.

If stung, remove the sting fast!

Treatment for stings

For the vast majority of beekeepers, stings can either be ignored or bathed with witch hazel, calamine lotion or bicarbonate of soda solution.

Beekeepers who are aware that they are prone to having fairly severe reactions to stings, such as significant pain and swelling, may decide to take medication such as aspirin or antihistamines before visiting the apiary. **However, they should always consult their own doctor beforehand.**

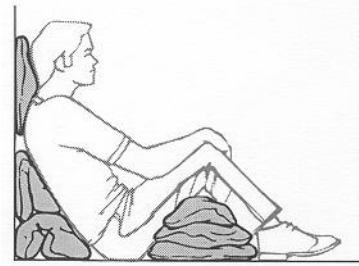
Beekeepers prone to having severe reactions to stings might have been prescribed by their doctor with an Epi-pen adrenaline injection to carry for an emergency. **Only the beekeeper or a trained colleague who has been given prior permission by the beekeeper should administer this injection.**

What to do

- 1. Move the person away from the hives**
- 2. Scrape out all stings as quickly as possible in order to stop further injection of venom**
- 3. Get the person to sit down and encourage him/her to remain calm**
- 4. If there are signs of difficulty breathing, light headedness or general reaction to the sting:**
 - Ask the person if this is normal and if he has any medication provided by his GP. If so let him medicate himself
 - Position the person as shown below and
 - Get someone to ring for an ambulance. **Give the address of the apiary** and the grid reference if known and say it is a **bee sting reaction**. This will help the ambulance team to prepare.

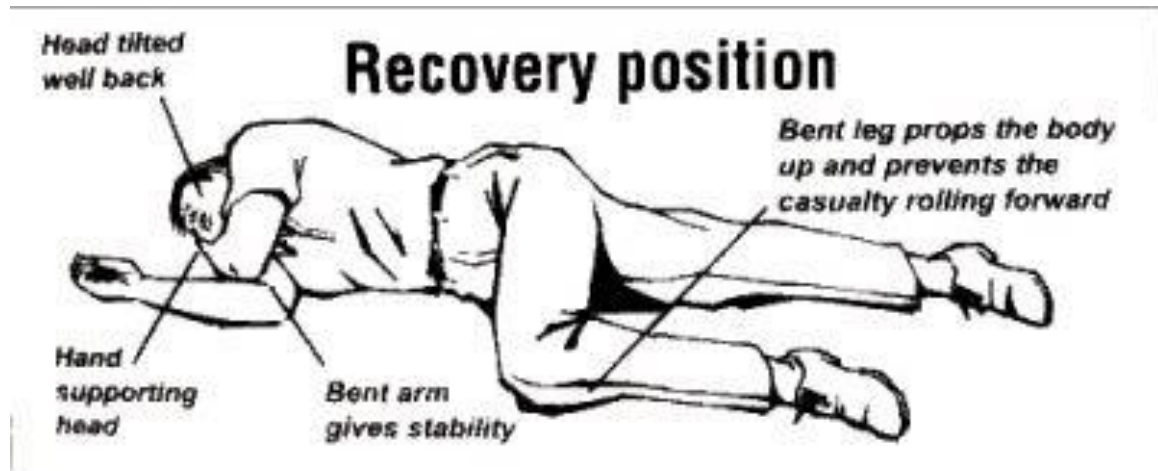
To position a conscious person

- Loosen any tight clothing around the neck and waist
- Sit the person on the ground leaning up against a tree, wall or side of a car
- Make the person as comfortable as possible with cushions, sacking, blankets etc to help breathing
- Stay with the person if at all possible and encourage them to breathe regularly.



To position an unconscious person

- Loosen any tight clothing and place the person in the recovery position (see illustration)



- Tilt the head back for a good airway
- Check that the person is still breathing
- Check that the person has a pulse in the side of the neck
- If there is another person available, send them to watch for the ambulance
- Do not try to give the person stung any food or drink.

If the person's heart or breathing stops, resuscitation should be provided by a trained person.

Anaphylactic shock is very rare, but it does happen, very quickly. When it does, prompt, calm and appropriate procedure is essential.

This leaflet is for general guidance only and is not intended to offer medical advice. If you think that the contents of this leaflet are relevant to you, you should seek qualified medical advice from your general practitioner before handling bees.

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