# Hyperventilation

This leaflet is a continuation of the relaxation pack which looks at anxiety and panic attacks



## **Acute hyperventilation**

Hyperventilation means over breathing, that is breathing in excess of your body's needs.

Acute hyperventilation is very common during panic attacks. This is understandable because some degree of over breathing is part of the body's normal response to threat.

Its function is to supply the muscles with more oxygen for 'flight' or 'fight'. It often happens after a combination of strong emotion (fear, excitement, anger etc.) and physical exertion, though either can bring it on.

If the extra oxygen isn't needed by the muscles, the effect can be dramatic and terrifying and can cause the following symptoms:

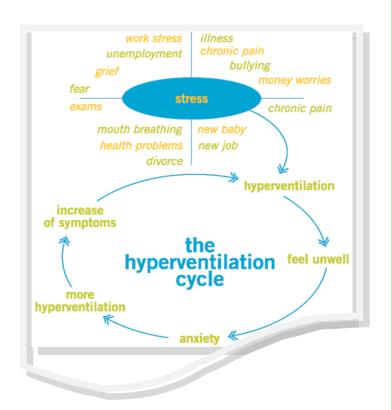
- Rapid breathing, but difficulty in getting breath
- Tightness in the chest
- Very rapid heartbeat
- Tingling or numbness
- Sudden emotional outbursts, eg. crying
- Feeling of faintness
- Feeling of unreality
- Visual problems
- Rigid muscles, cramps
- Sweating
- Feeling too hot or too cold

When you begin to over breathe, the balance of gases in the lungs is upset.

Breathing in an excess of air too frequently pushes out the carbon dioxide, which normally forms a reservoir in the lungs. Because there is too little carbon dioxide in the lungs, the blood becomes more alkaline, which causes the above symptoms. It is important to remember that the symptoms are the effects of too little carbon dioxide.

Two things are necessary; to stop over breathing, and get enough carbon dioxide back into the lungs. A general point to remember is that hyperventilation produces symptoms which are very frightening in themselves. These can cause more over breathing.

It is very important to break this vicious cycle of hyperventilation, leading to stress, by learning to control your breathing.



## Procedures for controlling hyperventilation

#### Catching it early

If it has happened to you before, you may be able to identify the warning signs, for example, a stifling feeling as if the widow should be open, tightness in the chest, or noticing your breathing is fast. These should be your cue to:

- Stop whatever you are doing and try to find a quiet place to sit down.
- Close your eyes and focus on the word 'calm' in your mid.
- Try to release some of the tension in the upper body. Sitting in a tense hunched-up position
  increase the possibility of hyperventilation. Dropping shoulders in a sideways widening direction
  makes hyperventilation more difficult since the chest and diaphragm muscles are stretched
  outwards.
- Breath slowly from the stomach, not the chest. Breath in to a count of four slowly and out to a count of four slowly. Or visualise your breathing in as going up one side of a hill, experiencing a plateau at the top and then breathing out as though coming down the other side.
- It may also help to place your hands with your fingertips together on your stomach, make sure that each time you breath in, your fingertips come apart.
- Concentrate on breathing out.

### The re-breathing technique

If your symptoms don't go away after a few minutes it is probable that you haven't caught it quickly enough, and you will need to use the re-breathing technique. This involves breathing in the air you have just breathed out. This air is richer in carbon dioxide and will thus quickly replenish the carbon dioxide you have been exhaling.



It is even better to use a paper bag (Not polythene) over your nose and mouth instead of your hands, if circumstances allow. Adjust your posture so that your elbows are on a level with or above your shoulders. (This makes it difficult to over breathe).

Make a mask of your hands and put them over your nose and mouth and keep them there.



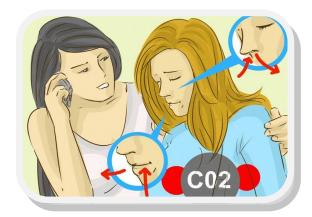
- Breathe in through your nose (if possible).
- Breathe out hard through your mouth.
- Breathe your own exhaled air.
- This should be done slowly and without holding your breath. Repeat four or five times (no more).
- All the time try to stay calm and relaxed.

## Information about hyperventilation

#### What to do if you are with someone who is hyperventilating

- 1. Don't allow yourself to panic. Keep calm, because fear can be infectious.
- 2. Familiarise yourself with each of the procedures for controlling hyperventilation. Encourage the person to use the procedures. They may need reminding of what to do, so it may help to talk them through it.
- 3. Don't shout or raise your voice. It should be firm but quiet. Speak slowly.
- 4. Comfort them physically: a hand gently cupping the back of their neck, or your arm loosely placed around their upper back may be very soothing.
- 5. They may become very emotional. Don't get into an argument by disagreeing with what they may be saying. Repeat calming and encouraging statements, such as, 'Just re breath your own air... your going to be alright... that's it, just drop your shoulders...relax'.
- 6. Afterwards, treat as if for shock, with rest and a sweet drink.





### Voluntary hyperventilation

If you find it difficult to believe that the terrifying symptoms experienced during a panic attack can be caused by hyperventilating, try a little experiment.

Deliberately breath quickly and deeply through your mouth and nose for 30 seconds and list the symptoms that you have experienced.

It is reassuring to have a paper bag handy for the rebreathing exercise if symptoms are particularly unpleasant.

This exercise is useful to show how you can both start and stop, and so control these unpleasant symptoms.

This experiment is not dangerous but it is probably more helpful to do it with somebody else.

