

# Blushing

## Introduction

**Blushing is the involuntary reddening of the face usually triggered by emotions such as embarrassment or stress.**

Other areas of the body such as the neck, ears and upper chest can also be affected. As well as causing redness, blushing can sometimes make the affected area feel hot.

Most people will find themselves blushing from time to time and it's not usually viewed as a cause for concern.

## What causes blushing?

'Normal' blushing happens when a strong emotional response stimulates the nervous system to increase the flow of blood into the skin of the face.

Abnormal (severe or frequent) blushing can have both psychological and physical causes.

Psychological causes include:

- social anxiety disorder – a fear of social situations that involve interaction with other people; often linked to a fear that they will embarrass themselves in front of others
- general anxiety disorder – where a person is repeatedly bothered by feelings of anxiety, worry and dread

Physical causes include:

- rosacea – a common skin condition that affects the face
- certain medications, such as tamoxifen used to treat breast cancer

Excessive sweating (hyperhidrosis) is often associated with blushing, although it is not a direct cause.

Read more about the causes of blushing.

---

## NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

## When to seek medical advice

A person may require treatment if:

- they develop a fear of blushing that causes them to avoid certain situations and interacting with other people, and begins to have a negative impact on their quality of life
- they experience frequent blushing that does not seem linked to any emotional trigger

## Treatment

The treatment for blushing will depend on the underlying cause.

If it is thought that the underlying cause is psychological, such as an irrational fear (phobia), then a talking treatment called cognitive behavioral therapy (CBT) can often be effective.

Medications such as selective serotonin reuptake inhibitors can also help relieve any associated feelings of anxiety and worry.

If the underlying cause is physical, such as rosacea, you may be advised to avoid common triggers such as stress, prolonged exposure to sunlight and spicy foods.

A surgical procedure called endoscopic thoracic sympathectomy (ETS) is often used to treat excessive sweating (hyperhidrosis) when it occurs with blushing. However, ETS is usually only recommended if more conventional treatments, such as psychological therapies, have not worked.

Read more about the treatment of blushing.



---

## NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

## Causes of blushing

**Blushing is caused by the part of the nervous system (network of nerves) responsible for automatic reactions. You do not have any control over this reaction.**

It is thought that when you experience a sudden and strong emotion such as embarrassment or stress, this stimulates your nervous system to cause the muscles in the face to relax.

This causes the blood vessels inside the face to widen, increasing blood flow into the skin, which then produces the redness associated with blushing.

This nervous system reaction can also trigger the release of the chemical adrenaline, which can speed up your heartbeat and breathing.

The release of adrenaline is responsible for the panicky and excitable feeling that people often experience when they are very embarrassed or stressed.

## Medical conditions

A common cause of excessive and frequent blushing is having an irrational fear (phobia) of blushing (erythrophobia).

People with erythrophobia often worry that they will blush when interacting with others, and that other people will mock them because of this.

Unfortunately this can trigger a vicious cycle. They become so worried about being the centre of attention in social gatherings that when this does happen, they suddenly become very embarrassed and start blushing. This reinforces their phobia.

Erythrophobia is often associated with other phobias and mood disorders such as social phobia and general anxiety disorder.

Sometimes, blushing can be associated with other medical conditions, such as:

- rosacea - a common skin condition that affects the face
- menopause - women going through the menopause will usually experience hot flushes, which can cause them to blush

---

## NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

- the rare disorder mastocytosis
- carcinoid syndrome - a number of symptoms that can occur alongside a rare type of cancer known as carcinoid.

Although it is not a direct cause of blushing, excessive sweating (hyperhidrosis) is often associated with the condition.

## Medication

Certain types of medication can cause blushing. These include:

- **tamoxifen**, often used to treat breast cancer
- **calcium-channel blockers**, used to treat high blood pressure and angina
- **calcitonin**, sometimes used to treat bone disorders such as osteoporosis
- **glyceryl trinitrate** and **isosorbide dinitrate** – sometimes used to treat angina

A number of medications that treat prostate cancer in men can also cause blushing. These include:

- buserelin
- triptorelin
- goserelin
- leuprorelin

If you are taking a medication that causes blushing and it is causing you significant problems, discuss this with your GP. They may be able to recommend an alternative medication.

## Other triggers

Other possible triggers of blushing include:

- drinking alcohol
- eating hot or spicy foods
- drinking hot drinks
- a high temperature of 38°C (100.4°F) or above
- sudden hot or cold temperatures
- exercise that causes an increase in body temperature
- monosodium glutamate – a chemical sometimes added to food to improve its flavour

---

## NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.



## Treating blushing

**Blushing only needs to be treated if it's interfering with quality of life or is the result of an underlying condition.**

Treatment will depend on the cause.

### Psychological therapy

If your blushing is caused by an irrational fear of blushing (erythrophobia) and/or social phobia, your GP may suggest that you try a psychological treatment.

A widely used treatment for phobias is cognitive behavioural therapy (CBT). CBT is a type of therapy based on the idea that unhelpful and unrealistic thinking leads to negative behaviour.

CBT aims to break this cycle and find new ways of thinking that can help you behave in a more positive way.

For example, many people with a fear of blushing have the idea that people will make fun of them if they blush. As part of treatment, the therapist could argue that this fear is based on an unrealistic thought. Most people are generally supportive and do not take pleasure in the embarrassment of others. So a more realistic thought would be: 'I may come across as a person who is shy but other people will usually be happy to accept this and often will make extra effort to engage with me'.

A course of CBT on the NHS usually consists of around six weekly sessions, with each session lasting an hour.

Other psychological therapies include:

- **Breathing techniques** to help relieve anxiety and rapid breathing.
- **Changing thoughts** – a technique that can be used to change and redirect your thoughts so that your blushing episodes are reduced.
- **Clinical hypnotherapy** – a technique that may help you to reduce your fear of blushing.

Medications such as the selective serotonin reuptake inhibitor (SSRI) type of antidepressant can also be used to combat the feelings of fear and anxiety that can occur in people with phobias.

Read more about the treatment of phobias.

---

## NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

## Rosacea

If blushing is being caused by rosacea (a chronic skin condition), avoiding common triggers such as stress, prolonged exposure to sunlight and spicy foods may be recommended. Using camouflage make-up and having laser treatment to shrink visible blood vessels are other treatment options for rosacea.

Read more about the treatment of rosacea.

## Menopause

Often, the menopause can cause hot flushes and blushing. If you have hot flushes as a result of the menopause, hormone replacement therapy (HRT) or a medication called clonidine may be recommended.

Read more about the treatment of the menopause.

## Surgery

Surgery may be considered in some cases of severe facial blushing which are accompanied by excessive sweating (hyperhidrosis).

### Endoscopic thoracic sympathectomy (ETS)

An endoscopic thoracic sympathectomy (ETS) is a surgical procedure where some of the nerves that cause the facial blood vessels to dilate (widen) are cut. Surgery is performed under a general anaesthetic, which means that you lose consciousness completely, and will not feel any pain or discomfort during the procedure.

During the procedure, a small incision (cut) beneath your armpit will be made and the sympathetic nerve that make you sweat will be cut. The sympathetic nerve controls the sweat glands of the hands and armpits. It is located inside the rib cage, near the top of the chest.

As well as reducing your sweating, ETS will also reduce facial blushing because the sympathetic nerves control the extra blood supply to the skin.

There are a few risks associated with the ETS procedure. These include:

- a small risk of injury to the chest
- haemothorax, when blood gathers in the space between your lungs and the walls of your chest (pleural cavity)

---

## NHS Choices puts you in control of your healthcare

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.

- a droopy eyelid, known as Horner's syndrome which occurs in about 1 in 100 cases after surgery
- compensatory excessive sweating, where you sweat more in other areas of your body which occurs in about 1 in 100 cases after surgery

Despite the small risks associated with ETS, a study that followed patients over a 15-year period reported a 93% cure rate for sweating.

ETS has proven to be very effective in reducing blushing, with a success rate of 80-90% in people who have had the procedure.

### **Make-up**

Blushing can be camouflaged using a green colour-corrective moisturiser. This type of moisturiser is also useful for covering up broken veins.

Some colour-corrective moisturisers can be used under a foundation. Others can be particularly useful for men with blushing problems. Hypo-allergenic brands are suitable for sensitive skin, and can be bought over-the-counter from your local pharmacist.

---

## **NHS Choices puts you in control of your healthcare**

NHS Choices has been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through to the practical aspects of finding and using NHS services when you need them.