SYMPTOM

Blue or grey skin or lips

Blue or grey skin or lips is a colour change linked to reduced oxygen or slower blood flow

WHAT IT FEELS LIKE
Often no feeling, though the area may feel cold

WHERE IT IS FELT
Lips, tongue, face, fingers, toes, or other skin

MOST COMMON CAUSES
Cold exposure, Raynaud phenomenon, acrocyanosis

WHEN IT IS URGENT
Sudden blue lips with breathlessness, chest pain, or confusion

USUALLY LASTS
Minutes after cold; longer when an illness causes it

SEE A DOCTOR IF
Repeated episodes or colour changes without cold exposure

Overview

Blue or grey skin or lips is sometimes called cyanosis . It can happen when blood near the skin carries less oxygen than usual or when circulation slows, particularly in cold fingers and toes.

The colour may be easier to notice on the lips, tongue, gums, around the eyes, or under the nails. On brown or black skin, cyanosis may look grey, white, or unusually pale rather than blue.

A temporary change in cold hands or feet is different from sudden blue lips or tongue. New cyanosis affecting the centre of the body can mean you are not getting enough oxygen and may need emergency care.

Bruising, skin pigment, dyes, medicines, or exposure to certain metals can also cause a blue-grey appearance.

What it may feel or look like

The colour change may cause no sensation. If circulation is reduced, the area may feel cold, numb, painful, or tingly.

You may notice:

Breathlessness, noisy breathing, chest pain, confusion, unusual sleepiness, dizziness, or fainting may mean the change is related to reduced oxygen rather than cold skin alone.

Lighting can affect appearance. If possible, check the lips, tongue, and hands in natural light.

- Blue, purple, or grey lips, tongue, gums, or skin
- Colour changes under the nails
- Cold or swollen fingers and toes
- Colour that appears after cold exposure and improves with warming
- Fingers that turn white, then blue, and later red

Common causes

Common and often temporary causes: Cold temperatures narrow small blood vessels near the skin, making fingers, toes, or the area around the lips look blue. The colour should improve with warming.

Raynaud phenomenon causes brief reductions in blood flow to the fingers or toes, often triggered by cold or stress. They may turn white or blue, then red as blood flow returns.

Acrocyanosis causes a persistent blue or purple colour in both hands or feet. The skin is usually cold and may be sweaty or mildly swollen.

Less common causes: Lung conditions can reduce oxygen entering the blood. Heart conditions may affect blood flow or the circulation of oxygen-rich blood. Abnormal forms of haemoglobin, the protein that carries oxygen, can also produce a blue-grey colour.

Methemoglobinaemia is a rare inherited or acquired condition in which haemoglobin cannot release oxygen normally. Certain medicines or chemicals may trigger it.

Medicines, metals, pigments, bruises, and skin conditions can create a blue-grey appearance even when oxygen levels are normal. This is sometimes called pseudocyanosis.

Urgent causes: Severe asthma, pneumonia, choking, a blood clot in the lung, serious heart problems, or another sudden breathing problem can cause central cyanosis and need prompt assessment.

When to seek medical care

Call emergency services if blue or grey lips, tongue, face, or widespread skin colour appears suddenly, particularly with:

Do not drive yourself if you are severely breathless, confused, or faint. If someone is choking and cannot breathe or cough effectively, begin appropriate choking first aid while emergency help is called.

A baby with a blue or grey tongue, lips, face, or body needs immediate assessment. Blue hands and feet may occur briefly in newborns, but colour affecting the lips or tongue should not be assumed to be normal.

Seek same-day medical advice if a new colour persists after warming, even without severe breathlessness, or if a home oxygen reading is unexpectedly low or steadily falling.

Book a routine appointment if episodes recur, affect daily activities, or happen without an obvious cold trigger. Mention new medicines, chemical exposure, finger pain, sores, swelling, or changes affecting only one side.

- Severe difficulty breathing, gasping, or choking
- Chest pain
- Confusion, fainting, or unusual drowsiness
- Inability to speak normally because of breathlessness
- A child who is limp, difficult to wake, or struggling to breathe

How the cause is found

A healthcare professional will ask when the colour started, which areas are affected, and whether cold, exercise, stress, medicines, or chemicals are involved. They may examine your lips, tongue, nails, heart, lungs, and circulation.

A pulse oximeter is a finger clip that estimates blood oxygen. Cold hands, movement, nail products, poor circulation, and differences in skin pigmentation can affect accuracy, so the reading must be considered with your symptoms and examination.

Tests may include blood tests, a chest X-ray, an electrocardiogram, or heart and lung function tests. An arterial blood sample can measure oxygen more directly, while specialist testing can identify abnormal haemoglobin.

Treatment and self-care

Treatment depends on the cause. Emergency care may include oxygen, breathing support, or treatment for a heart, lung, blood, or circulation problem.

If only your hands or feet change colour after cold exposure, move somewhere warm and warm them gently with gloves, dry clothing, or comfortably warm water. Avoid very hot water or direct heat, especially if the skin is numb, because burns may go unnoticed.

For repeated cold-triggered episodes, keep your whole body warm and avoid sudden temperature changes where possible. Stopping smoking or vaping nicotine may improve circulation because nicotine narrows blood vessels.

Do not use someone else's oxygen or change prescribed oxygen settings without medical advice. Do not delay emergency help while trying to obtain or repeat a pulse oximeter reading.

What to expect

Cold-related colour changes often fade when warmth and circulation return. Raynaud episodes may recur during cold weather or stress.

Cyanosis caused by a heart, lung, blood, or circulation condition may continue until the condition is treated. The outlook depends on the cause and how quickly it developed.

Record when episodes happen, their duration, and possible triggers. A photograph taken in natural light may help if the colour has resolved before an appointment.

Common questions

Can cold weather make my lips look blue?

Yes. Cold can temporarily narrow blood vessels near the skin. The colour should improve with warming. Persistent blue lips or breathing trouble need urgent assessment.

Can anxiety cause blue lips?

Anxiety may cause rapid breathing, tingling, or pale skin, but true blue or grey lips should not be assumed to be anxiety. Seek urgent help if the change is new or occurs with breathlessness, chest pain, confusion, or fainting.

Can I trust a normal pulse oximeter reading?

A normal reading can be reassuring but does not rule out every serious problem. Severe symptoms or obvious blue-grey lips or tongue require medical assessment regardless of the displayed number.

Is blue skin always caused by low oxygen?

No. Slow circulation, bruising, pigment changes, medicines, and chemical or metal exposure

can look similar. A medical examination can help identify the cause.

Sources

- NHS. Blue or grey skin or lips (cyanosis)
- MedlinePlus Medical Encyclopedia. Blue discoloration of the skin
- DermNet. Acrocyanosis
- U.S. Food and Drug Administration. Pulse oximeter accuracy and limitations
- National Library of Medicine, StatPearls. Central and Peripheral Cyanosis