

## Skin discoloration - bluish

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Cyanosis is a bluish color to the skin or mucus membranes that is usually due to a lack of oxygen in the blood.

### Considerations

Red blood cells provide oxygen to body tissues. Most of the time, almost all blood cells carry a full supply of oxygen. These blood cells are bright red, and the skin has a pinkish or red hue.

Blood that has lost its oxygen is dark bluish-red. People whose blood is low in oxygen tend to have a bluish color to their skin, called cyanosis.

Depending on the cause, cyanosis may develop suddenly, along with shortness of breath and other symptoms.

Cyanosis that is caused by long-term heart or lung problems may develop slowly. Symptoms may be present, but are often not severe.

When oxygen levels have dropped only a small amount, cyanosis may be hard to detect.

In dark-skinned people, cyanosis may be easier to see in the mucus membranes (lips, gums, around the eyes) and nails.

### Causes

Cyanosis that is seen in only one part of the body may be due to:

- A blood clot that blocks the blood supply to a leg, foot, hand, or arm
- Raynaud's phenomenon

#### LACK OF OXYGEN IN THE BLOOD

Most cyanosis occurs because of a lack of oxygen in the blood. This can be caused by the following problems.

Problems with the lungs:

- Blood clot in the arteries of the lungs (pulmonary embolism)
- Infection in the smallest air passages in the lungs of children, called bronchiolitis
- Long-term lung problems that become more severe, such as COPD, asthma, and interstitial lung disease
- Drowning or near-drowning
- High altitudes
- Pneumonia (severe)

Problems with the airways leading to the lungs:

- Breath-holding
- Choking on something stuck in the airways
- Croup
- Epiglottitis
- Seizures that last a long time

Problems with the heart:

- Heart failure
- Heart defects that are present at birth (congenital)
- Heart stops working (cardiac arrest)

Other problems:

- Drug overdoses (narcotics, benzodiazepines, sedatives)
- Exposure to cold air or water
- Toxins such as cyanide

## Home Care

For cyanosis caused by exposure to cold or Raynaud's phenomenon, dress warmly when going outside or stay in a well-heated room.

## When to Contact a Medical Professional

Bluish skin (cyanosis) can be a sign of many serious medical problems and should be taken seriously. Call or visit your health care provider.

For adults, call your doctor or 911 if you have bluish skin and:

- Your breathing is getting harder, faster, or you cannot get a deep breath.
- You need to lean forward when sitting to breathe.
- You are using muscles around the ribs to get enough air.
- You have chest pain.
- You are having headaches more often than usual.
- You feel sleepy or confused.
- You have a fever.
- You are coughing up dark mucus.

For children, call the doctor or 911 if your child has bluish skin and:

- Is having a hard time breathing
- The child's chest muscles are pulling in with each breath
- Is breathing faster than 50 to 60 breaths per minute (when not crying)
- Is making a grunting noise
- Is sitting with shoulders hunched over
- Is very tired
- Is not moving around very much
- Has a limp or floppy body
- The nostrils are flaring out when the child breathes
- Loses his or her appetite
- Is irritable
- Has trouble sleeping

## What to Expect at Your Office Visit

Your health care provider will perform a physical examination, which includes listening to your breathing and heart sounds. In emergency situations (such as shock), you will be stabilized first.

Medical history questions may include:

- When did the bluish skin color develop?
- Did it develop suddenly?
- Has it been developing slowly?
- Are your lips blue?
- Are your nailbeds blue?
- Is your body blue all over?
- Have you been exposed to cold?
- Have you suddenly gone to a high altitude?
- Have you breathed in anything poisonous?
- What other symptoms do you have?
- Do you have difficulty breathing?
- Do you have ankle, foot, or leg swelling?
- Do you have a cough?
- Do you have chest pain?

Tests that may be performed include:

- Arterial blood gas analysis
- Blood oxygen saturation by pulse oximetry
- Complete blood count (CBC)
- Chest x-ray
- ECG

For shortness of breath and cyanosis, you may receive oxygen.

### Alternative Names

Lips - bluish; Fingernails - bluish; Cyanosis; Bluish lips and fingernails; Bluish skin

### References

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