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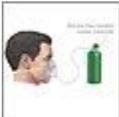
## Lung diffusion testing

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### Illustrations

[Lung diffusion testing](#)

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Diffusing capacity; DLCO test

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Lung diffusion testing looks at how well gases are passing from the air sacs of the lungs into the blood, to determine whether the lung is sending enough oxygen into the blood. The test measures the "diffusing capacity of the lung for carbon monoxide" or DLCO.

### How the Test is Performed [Return to top](#)

You breathe in (inhale) some gas containing a very small amount of [carbon monoxide](#). You hold your breath for 10 seconds, then rapidly blow it out (exhale). The exhaled gas is tested to determine how much of the carbon monoxide was absorbed during the breath.

### How to Prepare for the Test [Return to top](#)

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- Do not eat a heavy meal before the test.
- Do not smoke for at least 4 - 6 hours before the test.
- If you use a bronchodilator or inhaler medications, ask your health care provider whether or not you can use them before the test.

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The mouthpiece fits tightly around your mouth. Clips are put on the nose.

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The test is used to diagnose certain lung diseases. It may also be used to see how gases move from the lungs into the bloodstream.

## Normal Results [Return to top](#)

Normal test results depend on a person's:

- Age
- Gender
- Height
- Hemoglobin (the protein in red blood cells that carries oxygen) level

## What Abnormal Results Mean [Return to top](#)

Abnormal results usually mean that gases do not move normally across the lung tissues into the blood vessels of the lung. This may be due to lung diseases such as:

- Emphysema
- [Interstitial fibrosis](#)
- [Pulmonary hypertension](#)
- [Sarcoidosis](#)

## Risks [Return to top](#)

There are no significant risks.

## Considerations [Return to top](#)

Other [pulmonary function tests](#) may be done together with this test.

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Reynolds, HY. Respiratory Structure and Function: Mechanisms and Testing. In: Goldman L, Ausiello D, eds. *Cecil Medicine*. 23rd ed. Philadelphia, Pa: Saunders Elsevier; 2007: chap 85.

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