

Pulmonary Hypertension

Pulmonary hypertension is an uncommon illness affecting approximately 1% of the population, or 400,000 Canadians. It is a complex and serious lung disease that is progressive and potentially fatal, and it has significant financial, social, and emotional impacts on patients and their families. Other conditions share similar symptoms, so people are often misdiagnosed.

Pulmonary hypertension is defined by high blood pressure in the blood vessels that carry blood to the lungs. If left untreated, PH can lead to enlargement and weakness of the right side of the heart, a serious type of heart failure. Pulmonary hypertension can strike people of all backgrounds, ages, and sexes and can develop without any known cause. However, some conditions put people at greater risk of developing PH.

Numerous treatments are approved in Canada to slow disease progression and alleviate symptoms of some types of pulmonary hypertension.

Types of pulmonary hypertension

Pulmonary arterial hypertension

WHO Group 1

- **Idiopathic** (of no known cause)
- **Genetic**
- Due to **associated conditions** (e.g. scleroderma, HIV infection, liver disease, congenital heart disease, and the use of diet drugs, cancer drugs, or recreational stimulants)

In pulmonary arterial hypertension (PAH), blood cannot circulate normally in the lungs due to narrowing of the arteries.

PH associated with left-sided heart disease

WHO Group 2

- **Left-sided congestive heart failure**
- **Mitral valve disease**

PH associated with lung disease

WHO Group 3

- **Chronic obstructive pulmonary disease (COPD)**
- **Pulmonary fibrosis**
- **Sleep apnea**

Chronic thromboembolic pulmonary hypertension

WHO Group 4

Chronic thromboembolic pulmonary hypertension (CTEPH) is caused by blood clots in the arteries of the lungs (**pulmonary embolism**) that do not entirely dissolve, leading to scars in the affected arteries that impede blood flow into the lungs. Up to 4% of people who have a pulmonary embolism may develop CTEPH within 2 years. Surgery may cure or improve CTEPH.

PH caused by other diseases

WHO Group 5

- **Chronic renal failure**
- **Vasculitis**
- **Sarcoidosis**

Symptoms of pulmonary hypertension

Symptoms can go unnoticed at first and slowly develop until they cannot be ignored. The **most common symptoms** of pulmonary hypertension include:

- Shortness of breath
- Fatigue
- Exercise intolerance
- Chest pain
- Dizziness
- Bluish lips, hands, and feet
- Swollen ankles, feet, or legs
- Fainting

People living with pulmonary hypertension may not look ill, so pulmonary hypertension is often referred to as an invisible chronic illness.

