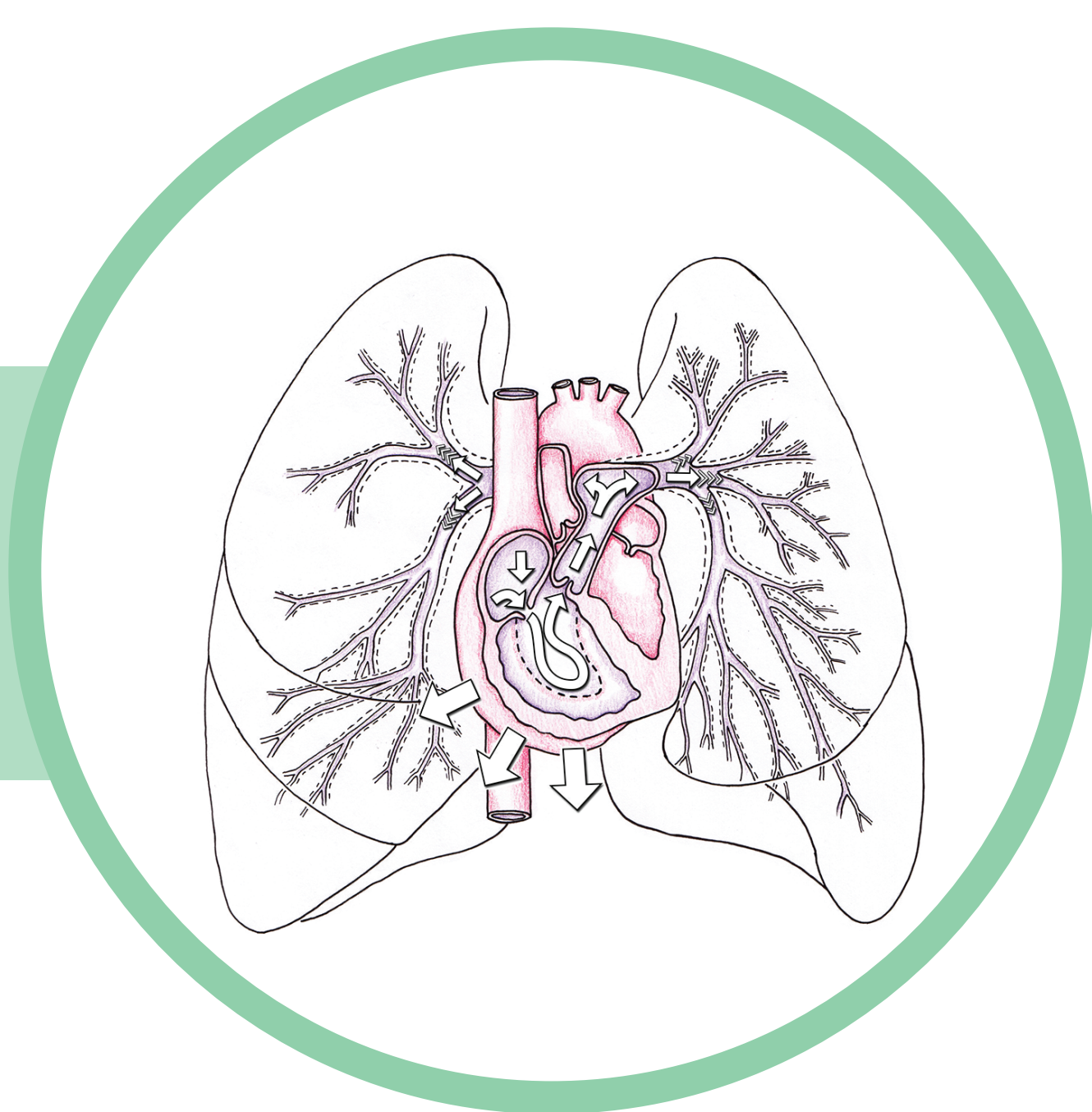


Without treatment, the average life expectancy of someone with PH is less than 3 years.



PH is characterized by the presence of high blood pressure in the lungs.

PH can lead to right-sided heart failure.

PH can strike people of all backgrounds, ages, and genders.

PH affects between 5,000 and 10,000 Canadians.

Signs & Symptoms

- **Dyspnea** (shortness of breath)
- **Fatigue**
- **Exercise intolerance**
- **Edema of ankles/feet or legs** (swelling)
- **Chest pain**
- **Cyanosis** (bluish hands, feet, and lips)
- **Syncope** (fainting)
- **Clinical signs of right-sided heart failure**

Risk Factors

Associated Conditions

- **Connective tissue disease**
(including scleroderma and lupus erythematosus)
- **Liver disease**
(portal hypertension)
- **HIV infection**
- **Congenital heart disease**

Pulmonary Emboli

- **Multiple or recurrent blood clots in the lungs**

Other

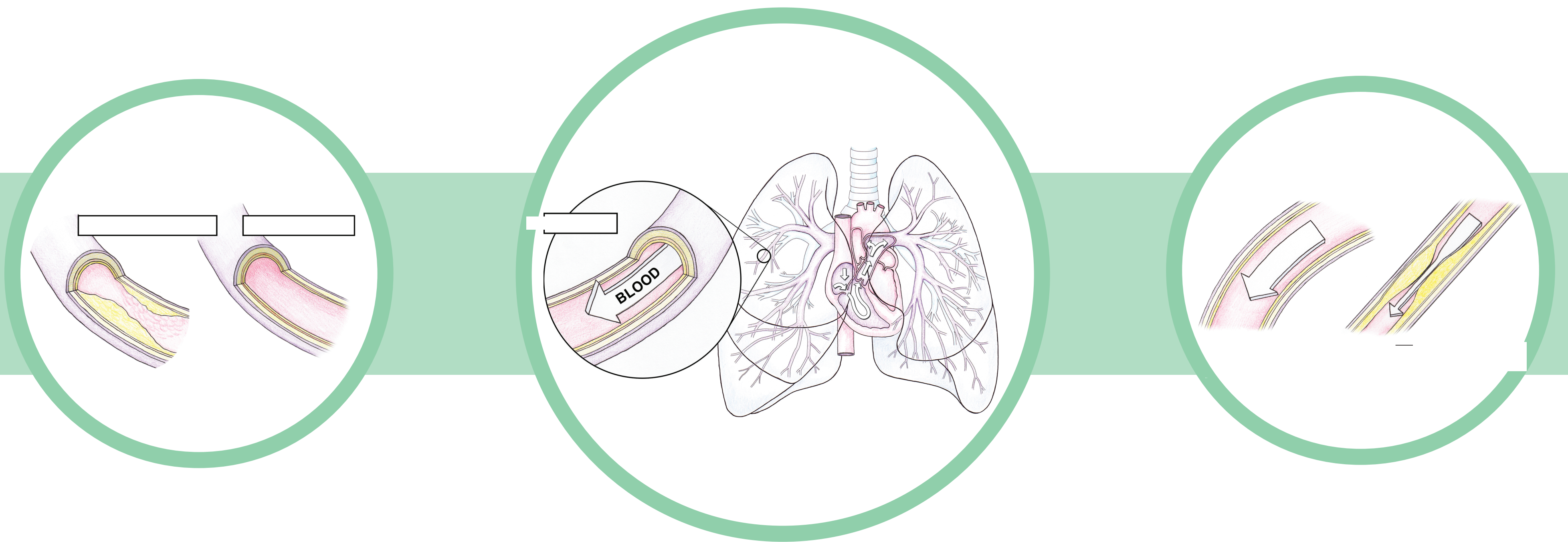
- **Family history of PH**
- **Use of certain drugs**
(e.g. anorexigens)



Pulmonary Hypertension

Pulmonary hypertension (PH) is a rare but very complex and serious lung disease that is progressive and potentially fatal.

Types of PH



Pulmonary arterial hypertension (PAH)

WHO Group I

- **Idiopathic**
- **Associated conditions**
(e.g. scleroderma)
- **Genetic**

PAH is a disease in which blood is not able to circulate normally in the lungs due to narrowing of the arteries.

This results in increased blood pressure in the lungs, causing the heart to work harder to pump blood into the lungs. **The heart can become enlarged, leading to right-sided heart failure and even death.**

Chronic thromboembolic pulmonary hypertension (CTEPH)

WHO Group IV

CTEPH is caused by blood clots that do not entirely dissolve following **pulmonary embolism**, leading to the formation of scars within the pulmonary arteries that impede blood flow into the lungs.

After pulmonary embolism, up to 4% of patients may develop CTEPH within 2 years.

PH associated with left-sided heart disease

WHO Group II

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

PH associated with lung disease

WHO Group III

- **COPD**
- **Pulmonary fibrosis**
- **Sleep apnea**

PH caused by various other diseases

WHO Group V

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

*A range of treatment options are available in Canada, **improving the quality of life** of people living with PH.*

PH symptoms are similar to those of other common conditions (asthma, COPD, anxiety, chronic fatigue, etc.).

Currently in Canada, it takes more than 2 years for many patients to get diagnosed with PH.

75% of patients have advanced PH when they are diagnosed.

Because PH is progressive, early diagnosis is critical to optimal treatment.



Diagnosis & Referral

Investigations

- ECHOCARDIOGRAM
- Blood tests
- Chest X-rays
- ECG
- Pulmonary function tests

Referral to specialized centres for confirmation tests

- Exercise tolerance tests
- CT scanning/imaging
- Ventilation/perfusion lung scan
- Right heart catheterization

Treatment Options

- A number of PAH treatments are approved in Canada to slow disease progression and alleviate symptoms.
- There is a potential cure for CTEPH through surgery. Approved medical treatment may also slow disease progression and alleviate symptoms.
- Centres specialized in the treatment of PH (adult and pediatric) and CTEPH are located throughout Canada.