



FACTS ABOUT POLYCYTHEMIA VERA (PV) (polly-sigh-THEE-me-ah-VAIR-ah)

WHAT IS PV?

PV is a specific type of myeloproliferative neoplasm, or MPN. It is a rare, chronic blood cancer in which a person's body makes too many red blood cells and may also result in too many white blood cells or platelets.

Too many red blood cells can cause the blood to thicken. This can lead to blood clots that block the flow of blood through the arteries and veins. A heart attack or stroke can result.

A serious, chronic condition, PV develops slowly. Some people do not have symptoms for many years. But PV is progressive—meaning that it will likely get worse over time.

WHO IS AT RISK FOR PV?

Certain factors may increase the risk for developing PV. These are:

- Age—PV is more common in people over 60
- Being male—men are at *slightly* higher risk for PV than women
- Family history—even though PV is not considered a genetic disease, having close family members with PV can increase a person's chance of having it

HOW COMMON IS PV?

Only about 100,000 people in the United States are living with PV.

PV is most common in people older than 60, although it may occur at any age.

WHAT CAUSES PV?

The main cause of PV is a mutation—or change—in a certain gene in the body called the Janus Kinase 2 (*JAK2*) gene, which results in an overproduction of blood cells. In people with PV, 95% have this mutation.

WHAT ARE THE SIGNS AND SYMPTOMS OF PV?

A person with PV may experience:

- Shortness of breath
- Abdominal pain or discomfort
- Early feeling of fullness when eating
- Pain under the left ribs
- Day or night sweats
- Problems concentrating
- Numbness in hands and/or feet
- Dizziness, vertigo, lightheadedness
- Insomnia
- Headache
- Double or blurred vision

- Itching, also called pruritus
- Reddening of the face, or a burning feeling on the skin
- Angina (chest pain)
- Bone pain
- Fatigue (extreme tiredness)
- Ringing in the ears

Some of the symptoms of PV are caused by thickening of the blood. When the blood thickens, oxygen can't get to parts of the body.

Other symptoms of PV, including an early feeling of fullness when eating and pain under the left ribs, may be caused by an enlarged spleen. Between 30% and 40% of PV patients present with an enlarged spleen.

WHAT OTHER HEALTH PROBLEMS CAN PV CAUSE?

PV can also cause more serious health problems, including:

- Blood clots leading to heart attack or stroke
- Stomach ulcers, gout, or kidney stones
- Angina (chest pain)

In about 10% of people who have PV, the disease may progress to myelofibrosis (my-eh-lo-fye-BRO-sis), or MF, over 10 years. PV may also progress to acute leukemia.

HOW IS PV DIAGNOSED?

Early diagnosis is important with PV. If your Healthcare Professional suspects you have PV, a blood test can aid in the diagnosis.

About 30% of PV cases are diagnosed after a cardiovascular event such as a heart attack or stroke.

WHAT IS THE PROGNOSIS?

Although not curable, PV can be managed effectively over the course of the disease. In people with PV, the median survival approaches or exceeds 20 years.

Because PV affects each person differently, each person's risk factors should be evaluated individually by their Healthcare Professional.

HOW IS PV MONITORED?

Healthcare Professionals monitor PV with periodic blood tests and by tracking the symptoms of PV. Regular monitoring and medical care can help detect how the disease is changing over time.

New or worsening symptoms should be reported to a Healthcare Professional.

WHAT'S YOUR *PV STATE OF MINE*?

If you are living with PV, your symptoms, blood counts, even your feelings can help you identify your *PV STATE OF MINE*—or where you are on your journey with PV. To learn more, visit VoicesOfMPN.com.

