If you are at risk of a blood clot, your health care provider may prescribe treatment to prevent the clot. The treatment will depend on how high your risk of a blood clot is. It may also depend on other things such as whether you are in hospital, living in a long term care facility (nursing home), or taking a long trip.

What are blood clots?
When you cut yourself, like a cut on your hand or arm, blood clots can be good. They stop the bleeding. When a blood clot forms inside the body, it can sometimes block a blood vessel, such as a vein or artery. If blocked, blood may not be able to flow and organs could be damaged.

What are blood clots?

**HIGH RISK**
- are over 60 years of age
- are obese
- are pregnant (or recently gave birth)
- take birth control pills
- take hormone replacement therapy
- have cancer
- had surgery recently
- are in hospital and lying in bed
- had a blood clot before
- have a medical condition, such as high cholesterol, high blood pressure, diabetes,
- chronic inflammatory disease
- was in hospital or in nursing care facility in last 90 days

**LOW RISK**
- sit most of the day
- had a minor injury
- are ill
- have an infection

**NO RISK**
None of the above

How can blood clots be prevented?
You can discuss your risks of having a blood clot with your health care providers. You and your providers can make a plan about how to prevent a blood clot. The plan will depend on your risks, your health and what you are doing. They may prescribe medications or suggest other ways to prevent a blood clot.

If you have symptoms of a blood clot including swelling, pain, tenderness, or redness of the legs or arms; difficulty breathing, chest pain or discomfort; contact your doctor right away.
Taking a long trip (more than 4 hours long)

If you are at higher risk of a blood clot
Your health care provider may tell you to wear graduated compression stockings or take a blood thinner, called low molecular weight heparin.
If it’s not possible to wear the stockings or take a blood thinner, your doctor may tell you to take aspirin.

**Benefits:** 0 to 20 fewer people out of 10 000 may have a blood clot if they wear compression stockings.

**Harms:** There may be no serious harms when wearing compression stockings.

If you have no risk of a blood clot
Your health care provider may tell you that you do not have to wear compression stockings or take blood thinners.

**Benefits:**
If people take blood thinners at home, there may not be more benefits

**Harms:** If people take blood thinners at home, there may be more people who have a major bleed and need to go to hospital – 4 to 13 more people per 1000.

Compression stockings are special knee-high (or thigh-high) socks that keep blood from “getting stuck” in your legs.

The stockings put pressure near your ankle and less pressure higher up your leg. This helps the blood in your leg move up to your heart.

Blood thinners do not actually thin your blood. They increase the time it takes for your blood to clot.

Some blood thinners are given by needle. Heparin is a blood thinner given by needle. There are two types:
• standard or unfractionated heparin (UFH)
• low molecular weight heparin (LMWH) - dalteparin (Fragmin) or enoxaparin (Lovenox) or tinzaparin or nadroparin.

You can only have UFH in hospital. But you can give yourself LMWH or get it at the doctor’s office.

Some blood thinners are taken as a pill:
• direct oral anticoagulants (DOACs), such as apixaban (Eliquis), dabigatran (Pradaxa), edoxaban (Lixiana or Savaysa), or rivaroxaban (Xarelto) pills
• Vitamin K antagonists (VKA) - warfarin (Coumadin) pills
• antiplatelets - aspirin pills or liquid.

Receiving health care and living at home

If you are at low risk of a blood clot
Your health care provider may tell you that you do not have to take blood thinners.

**Benefits:**
If people take blood thinners at home, there may not be more benefits

**Harms:** If people take blood thinners at home, there may be more people who have a major bleed and need to go to hospital – 4 to 13 more people per 1000.

Going home after being in hospital for a severe illness

Your health care provider may prescribe different treatments while you are in hospital to prevent a blood clot.
When you go home, your doctor will not prescribe a blood thinner to you.

**Benefits:**
If people take blood thinners at home after being in hospital, there may be a very small number of people who would benefit: 2 to 5 fewer people out of 1000 would have a blood clot.

**Harms:** If people take blood thinners at home after being in hospital, there may be more harms: 4 to 13 more people per 1000 may have a major bleed and need to go back to hospital.
Living in a nursing home

There may be more harms, such as bleeding, if you take a blood thinner to prevent a clot. Your health care provider may not prescribe a blood thinner for you.

RECOMMENDATION 15

Have a long-lasting medical condition

(such as high cholesterol, high blood pressure, diabetes, or chronic inflammatory disease)

There may be more harms, such as bleeding, if you take a blood thinner to prevent a clot. Your health care provider may not prescribe a blood thinner for you.

RECOMMENDATION 15

SPEAKING WITH YOUR HEALTH CARE PROVIDER

To understand the different reasons to take a blood thinner to prevent a blood clot, you can speak to your health care provider about

- your risk of having a blood clot
- the pros and cons of taking a blood thinner or wearing compression stockings
- whether you want to take blood thinners or wear compression stockings
- how often you have to take blood thinners or if you need help putting on the stockings
- how often you need blood tests to check how well your blood thinner is working
- how much it costs
- what support is available for you and your family
- where to find more information

Link to the guidelines:
American Society of Hematology 2018 guidelines for management of venous thromboembolism: prophylaxis for hospitalized and non-hospitalized medical patients


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