

Briefing for the Citizen Participation and Public Petitions Committee on petition [PE2016](#): Raise awareness of Thrombosis in Scotland, lodged by Gordon McPherson.

Calling on the Scottish Parliament to urge the Scottish Government to raise awareness of the risk factors, signs and symptoms of Thrombosis

Brief overview of issues raised by the petition

[Through Freedom of Information requests](#)ⁱ, the petitioner has ascertained that thrombosis kills approximately 11,400 people every year in Scotland, which he says is approximately one in every four deaths recorded. However, in its response National Records for Scotland (NRS) provided clarification and explanation of the way causes and contributory factors are detailed when deaths are recorded, and included the range of conditions related to Deep Venous Thrombosis:

“DVT (Deep Venous Thrombosis) on its own is an unlikely cause of death, generally becoming life threatening when embolism occurs, usually to the lung. Pulmonary embolism is usually due to deep venous thrombosis” (NRS FOI response).

The petitioner believes that there is not enough awareness of the condition its associated risks, or its signs and symptoms.

The petitioner mentions his involvement as a layperson in the development of clinical guidelines, : the Scottish Intercollegiate Guidelines Network (SIGN) Guidelines [122](#) (2010, updated 2014) and [129](#) (2013) along with the National Institute for Healthcare Excellence ([NICE](#)) [NG 89 Guideline](#) - Volume 1. NICE NG 89 Guideline - [Volume 2](#).

A [new SIGN guideline has been proposed](#) on the topic.

Thrombosis

Thromboses can develop in either veins or arteries and are clots of blood that form. In [arterial thrombosis](#) the blockage can prevent blood reaching vital organs.

According to NHS Inform:

“Deep vein thrombosis (DVT) is a blood clot that develops within a deep vein in the body, usually in the leg.

[Blood clots](#) that develop in a vein are also known as venous thrombosis.

DVT usually occurs in a deep leg vein, a larger vein that runs through the muscles of the calf and the thigh. It can also occur in the pelvis or abdomen.

It can cause pain and swelling in the leg and may lead to complications such as pulmonary embolism.

DVT and pulmonary embolism together are known as venous thromboembolism (VTE).”

According to NHS Inform, a pulmonary embolism:

“is the most serious complication of DVT. It happens when a piece of [blood clot](#) (DVT) breaks off and travels through your bloodstream to your lungs, where it blocks one of the blood vessels. In severe cases this can be fatal.

If the clot is small, it might not cause any symptoms. If it's medium-sized, it can cause chest pain and [breathing difficulties](#). A large clot can cause the lungs to collapse, resulting in [heart failure](#), which can be fatal.

About one in 10 people with an untreated DVT develops a severe pulmonary embolism.”

The risk of developing DVT can be reduced in **some** cases with lifestyle changes such as exercising more, stopping smoking, maintaining a healthy weight and eating a more healthy diet.

Cancer and heart disease can increase the risk of developing DVT.

Testing for DVT can be done using [the D-dimer test](#). This test could be indicated when someone has symptoms of a disease or condition that causes [acute](#) and/or [chronic](#) inappropriate blood clot formation such as: DVT (Deep Vein Thrombosis), PE (Pulmonary Embolism), or [DIC \(Disseminated Intravascular Coagulation\)](#), and to monitor the progress and treatment of DIC and other thrombotic conditions.

Public awareness including research

There have been a [number of studies over the past two decades, and more recently](#), that have considered the extent of public awareness of thrombosis.

One study, carried out in 2015 with 800 participants from a range of countries, including the UK, concluded that:

“On a global level, public awareness about thrombosis overall, and VTE in particular, is low. Campaigns to increase public awareness about VTE are needed to reduce the burden from this largely preventable thrombotic disorder.”

[National Thrombosis Week runs from 1-7 May 2023](#) and is a part of an ongoing public awareness raising campaign, organised by Thrombosis UK.

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21 April 2023

The purpose of this briefing is to provide a brief overview of issues raised by the petition. SPICe research specialists are not able to discuss the content of petition briefings with petitioners or other members of the public. However, if you have any comments on any petition briefing you can email us at spice@parliament.scot

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