

# Smoking and Limb Amputation

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This leaflet is for patients who are at risk from, or who have been diagnosed with, Peripheral Vascular Disease (PVD). This may mean that your legs are showing the signs and symptoms of this condition: (ulceration, discolouration, intermittent pain) or you may have already had surgery for blocked arteries (an arterial by-pass or angioplasty). You may have already had amputation of a limb or part of a limb.

## Why do I need to read this leaflet?

You will have read information about the risk of smoking and may be aware that it causes lung cancer, heart attacks and strokes. However, there is less written information specifically about the fact that smoking is the most common preventable cause of peripheral vascular disease (PVD) and that this can lead to amputation.

**Therefore if you have any signs of PVD or have had surgery for blocked arteries or if you already have had an amputation, it is vitally important that you stop smoking to prevent further surgery and limb loss.**

**It is estimated that there are many people in the UK who have PVD and have no symptoms until they have a sudden heart attack or stroke. Giving up smoking is the best health outcome for everyone.**

## What is Peripheral Vascular Disease?

This occurs when the walls of the arteries become sticky from chemicals in the blood which causes fatty deposits to stick more easily to the walls of the arteries. The fatty deposits are called atheroma and they are made up of cholesterol and other waste substances. The deposits result in narrowing of the blood vessels and loss of oxygen and nutrients to the cells and tissues. This can ultimately lead to the artery becoming blocked with total loss of blood supply to the limb(s). This is sometimes called Critical Limb Ischaemia.

The blocking of the blood vessels is called atherosclerosis and smoking is the most significant risk factor to having this condition.

## What causes damage to the blood vessels?

Cigarettes have hundreds of chemicals in them, many of which cause damage to the blood vessels. These include Nicotine, Carbon Monoxide, Tar, and other oxidizing chemicals. They also contain a range of metals including aluminium, cadmium, copper, lead, mercury, nickel and zinc. Inhaling these metals lead to structural damage of the vascular system.

## If I have already had surgery for a blocked artery, is it worth me giving up smoking?

Evidence shows that those patients who continued to smoke following surgery were more likely to progress to having another blocked artery than those who gave up smoking following surgery. Also those patients with intermittent pain (claudication) similarly benefitted from giving up smoking.

## Can I use tobacco in another way that will make it less harmful?

Using tobacco as nasal or oral snuff has its own harmful effects ( cancer of the nose and mouth). The many damaging chemicals in tobacco will still be absorbed into the blood stream and cause damage to your arteries, although more research is required to report the exact cause and effect of this.

It is likely that substances used in shisha pipes contain tobacco and therefore will also have a detrimental effect on the circulation to your legs.

## What is Buerger's Disease?

Buerger's disease affects blood vessels in the arms and legs. Blood vessels swell, which can prevent blood flow, causing clots to form. This can lead to pain, tissue damage, and even gangrene (the death or decay of body tissues). In some cases, amputation may be required. Almost everyone with Buerger's disease smokes cigarettes. However, Buerger's disease can occur in people who use other forms of tobacco, for example, chewing tobacco. People who smoke 1½ packs of cigarettes a day or more are most likely to develop Buerger's disease.

## What is Cannabis Arteritis?

Cannabis has a number of harmful chemicals in it which have been known to cause blocked arteries. Cannabis Arteritis is a condition where the plaque builds up in the blood vessels in the limbs which can lead to a blocked artery, death of the tissues and then amputation.

If you already have signs of lack of blood supply to the legs you will have a better prognosis (outcome) if you stop taking cannabis.

## Should I use e-cigarettes to stop smoking?

Expert independent evidence that has been reviewed by Public Health England (PHE) concludes that e-cigarettes are significantly less harmful to health than tobacco and have the potential to help smokers quit smoking.

However, be aware that there may be nicotine in these products. Therefore, ensure you reduce the level of nicotine in such products as soon as possible: the nicotine, as well as being addictive, also causes your blood vessels to narrow and prevents your body from establishing natural bypasses around any blockages that might occur in your blood vessels

There have been no studies on the long term effects of e-cigarettes and particularly the long term effect on the peripheral vascular system. Therefore, if they are used as a tool to assist smoking cessation, we recommended that their use is stopped as soon as possible.

## How can I get help to stop smoking?

There will be a stop smoking service in your local area. We have put the contact details at the end of this leaflet. Talk to a member of staff here at the centre or at your GP surgery about stopping smoking and they will also support you in taking the first step to make contact with your stop smoking service.

## What is the take home message of this leaflet?

***“People who smoke are likely to worsen their symptoms of PVD, and as a result increase their risk of amputation. Compared to smokers, people who quit smoking have less severe pain when walking and are less likely to develop pain at rest. They live longer, respond better to treatment, and are less likely to require amputation. Quitting smoking will reduce your risk of developing PVD and the longer you have quit, the lower your risk of developing symptoms of PVD.”***

# Stop Smoking Services:

## Dorset

Live Well Dorset:

E-mail: [livewelldoeset.co.uk/stop-smoking](mailto:livewelldoeset.co.uk/stop-smoking)

Tel: 0800 840 1628

## Hampshire

Hampshire Stop Smoking Service

Quit4Life

E-mail: [quit4life@nhs.net](mailto:quit4life@nhs.net)

Tel: 0845 602 4663

01252 335 120

## Wiltshire

Smoke Free Wiltshire

E-Mail: [wiltstopsmoking@nhs.net](mailto:wiltstopsmoking@nhs.net)

Tel: 0300 003 4566

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## Dorset Prosthetic Centre

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