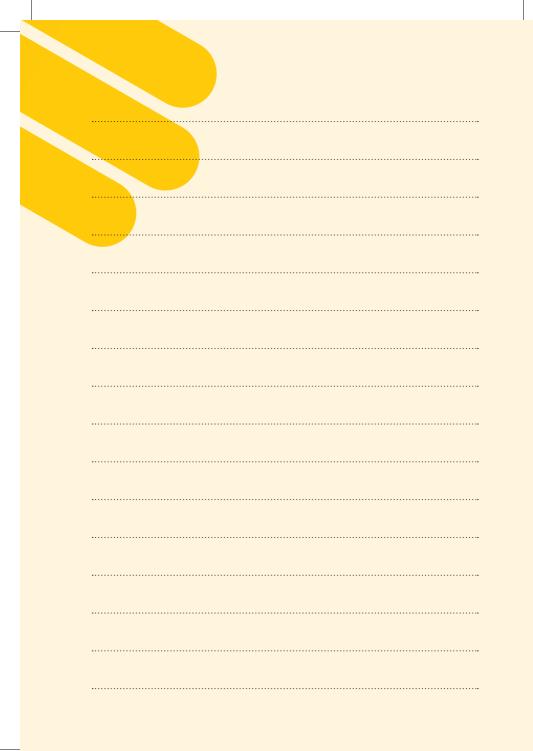
### For professionals

# KNOW YOUR PULSE PREVENT STROKE



Know your pulse

# **PREVENT STROKE**

Atrial fibrillation is a debilitating and health-threatening arrhythmia the most serious consequence of which is stroke (ischaemic stroke). It is common among older people. An irregular pulse is a sign of atrial fibrillation.

Feeling the pulse manually is a skill that clients can be taught quickly and easily during an office visit. Everyone over 60 years of age should feel his or her pulse daily.

# ATRIAL FIBRILLATION - A COMMON AILMENT BECOMING MORE COMMON

There are at least 100,000 atrial fibrillation patients in Finland. The ailment is rare in people under 60 years of age but in people over 60 it becomes more common as they grow older. Every tenth person over 75 years of age has atrial fibrillation.

Without preventive measures, the prevalence of atrial fibrillation is predicted to increase 2–4-fold by the year 2050 – this means as many as 400,000 people in Finland.

Manually feeling the pulse could prevent up to thousands of serious strokes annually and significantly reduce the economic burden strokes place on the healthcare system. The costs of the first year of treatment of a stroke patient amount to EUR 21,000.

## Detecting atrial fibrillation increases life expectancy and improves the quality of life

In many cases, atrial fibrillation occurs in periodic spurts, and therefore it is often unnoticed at visits to a doctor or nurse.

Symptoms of atrial fibrillation include fatigue, palpitation, nausea and exhaustion. Treatment of arrhythmia alleviates symptoms. First and foremost, treatment can prevent thromboembolic complications, of which a life-threatening stroke is the most common in patients with atrial fibrillation. Atrial fibrillation can also be completely asymptomatic, but hazardous to the brain nevertheless.

Nearly two out of three atrial-fibrillation-related strokes can be prevented by means of anticoagulant treatment to reduce blood clotting ("blood thinning medicine"). Palpitations and other harmful effects on the heart associated with atrial fibrillation can be relieved. The quality of life improves when normal heart rhythm is restored or the pulse rate is readjusted.

In atrial fibrillation, heart atria do not contract effectively but quiver, in a manner of speaking. The pulse is irregular and uneven. There is a risk of blood clot formation. Blood clots can travel from the heart toward the brain, causing vascular occlusion and a life-threatening disturbance of the cerebral circulation.

# TEACHING PATIENTS TO FEEL THEIR PULSE IS EASY

Teaching patients to feel their pulse takes about 10 minutes and is very effective. Feeling the pulse manually is easy, and older people will also learn the skill quickly. The prime objective is to make feeling the pulse a regular habit.



#### Learning to feel the pulse

## **GETTING STARTED**

- Settle in a quiet place. Tell the client what feeling the pulse is about.
- Instruct the client to experiment with feeling his/her pulse. For most people, it is easiest to detect the pulse on the thumb side of the wrist.
  Some people feel the pulse easiest in the bend of the elbow or the neck.



 Instruct the patient to press lightly on the area being felt with one or more fingers. When the patient finds the pulse, check it yourself in another area, for example the neck.

## REGULAR OR IRREGULAR PULSE?



First, pay attention to whether the beats occur **regularly** or **irregularly**. Observation can be facilitated by counting aloud or saying "yep" after every beat. This will make it easier to notice any change in the rhythm.

Next, measure the pulse rate, i.e. how many times a minute the heart beats. Tell the client when the measurement begins and ends. You can instruct the client to use a watch to monitor how many beats occur in a half minute and multiply the figure by two.



## **MAKING IT A DAILY HABIT**

Instruct the client to continue to monitor his/her pulse, even it has been regular for a long time. Regularity is indicative of the present situation and does not eliminate the risk of arrhythmia in the future.

Instruct the patient to fill in the pulse monitoring diary. The regularity or irregularity of the pulse, as well as the pulse rate, is recorded in the pulse-monitoring diary in the morning and in the evening.

Date		Beats/min	Regular	Irregular
5.3.	MORNING	92	×	
	EVENING	110		X

At the end of the training session, ask clients to repeat in their own words what they learned. Repetition makes learning more effective.



#### Further information and instructions for feeling the pulse can be found in Finnish at: **www.tunnepulssisi.fi**





Yksi elämä

Know your pulse is one of the One life projects conducted by the Finnish Brain Association, the Finnish Diabetes Association and the Finnish Heart Association.