

# Coronary Artery Disease

**I'm getting older and am worried about a hardening of the arteries. Does this make diving dangerous?**

---

*Answer from DAN experts:*

Coronary atherosclerosis is commonly described as 'hardening of the arteries'. It's the result of the deposition of cholesterol and other material along the walls of the arteries of the heart. The walls of the arteries, in response to the deposition of this material, also thicken. The end result is a progressively increasing blockage to blood flow through the vessel. Many factors contribute to the development of coronary atherosclerosis: a diet high in fat and cholesterol, smoking, hypertension, increasing age and family history. Symptomatic coronary artery disease is a contraindication to safe diving: don't dive with it. Coronary artery disease results in a decreased delivery of blood - and therefore, oxygen - to the muscular tissue of the heart. Exercise increases the heart's need for oxygen. Depriving myocardial tissue of oxygen can lead to abnormal heart rhythms and/or myocardial infarction, or heart attack. The classic symptom of coronary artery disease is chest pain, especially when it follows exertion. Unfortunately, many people have no symptoms before they experience a heart attack. Cardiovascular disease is a significant cause of death among divers. Older divers and those with significant risk factors for coronary artery disease should have regular medical evaluations and appropriate studies performed (e.g., treadmill stress test). Medications typically used in the treatment of this disease include nitroglycerin, calcium channel blockers and beta-blockers. At some point, someone with coronary artery disease may need a revascularization procedure, or the re-establishment of blood supply, through bypass surgery or angioplasty. If the procedure is successful, the individual may be able to return to diving after a period of healing and a thorough cardiovascular evaluation.