



Peripheral Artery Disease

OVERVIEW

Peripheral artery disease (PAD) is the progressive occlusion of the arteries to the legs, abdomen, arms, and brain; but is most common in the arteries of the legs and pelvis (lower extremity PAD). It has been called “peripheral” relative to the arteries that supply the heart, but these arteries supply the majority of the body its critical blood flow. It is a form of atherosclerosis (hardening of the arteries) caused by the collection of plaque (made of fat, cholesterol, calcium, and other substances found in the blood) which hardens and gradually blocks the arteries over time. This limits the flow of oxygen-rich blood from the heart to other parts of the body, which can limit physical function and reduce quality of life, and increase the risk of amputation, heart attack, and stroke.¹ PAD is also associated with cognitive impairment and dementia, as well as a 2-4 fold increased risk of death.¹

Clinician and public awareness of PAD, its risk factors, and complications is low.¹ This lack of awareness can have a significant impact on recognizing signs and symptoms, proper screening when risk factors are present, and appropriate care of the disease. Additionally, there may be a lack of knowledge of the health impacts of poorly managed PAD.¹ Low awareness may contribute to delayed or underused treatment.¹

Sign and Symptoms of PAD

- Pain, aching, heaviness, or cramping in legs
- Lack of toenail and leg-hair growth
- Pale, discolored, or blue leg or foot
- Leg weakness or numbness
- Sensation of “pins and needles” in leg or foot
- Slow healing sores or wounds on toes, feet, or legs

Disparities in PAD Incidence and Care

- Black individuals have >2-fold higher odds of having PAD than White individuals (regardless of age or sex)²
- Lifetime risk of PAD (men & women): ~30% for Black individuals and ~20% for non-Hispanic White and Hispanic individuals¹
- >2-fold increased risk for PAD in adults regardless of race with low household income, low education levels, and high neighborhood deprivation¹
- ~56% of zip codes with the highest rates of amputation were in the Southern region of the U.S.³

PAD is the third most common manifestation of atherosclerotic disease, behind coronary artery disease and stroke.¹ In the U.S., PAD affects about 8-10 million adults, and causes about 150,000 non-traumatic limb amputations per year.⁴ Significant racial/ethnic and geographic disparities are associated with elevated incidence and severity of PAD.⁴ Suboptimal management of modifiable risk factors, delayed recognition of PAD, limited health insurance coverage for many high-risk groups, and inadequate access to advanced PAD care can lead to more amputations, deaths, and medical expenditures.^{3,4} It is recommended that developing community-based tools and strategies for the diagnosis and management of PAD,

particularly targeting communities with high amputation rates, may help reduce these disparities.^{3,4}

PAD NATIONAL ACTION PLAN

The American Heart Association and collaborating partners have created the [PAD National Action Plan](#) as a road map for a coordinated and enduring approach to vascular health. The plan outlines six strategic goals to improve the awareness, diagnosis, and treatment of PAD along with tactics that are essential to achieving these goals. Importantly, a consistent theme throughout the plan is to address the inequities in the diagnosis and treatment of PAD by race/ethnicity, socioeconomic status, and sex.

Furthermore, the plan outlines approach to enhance PAD prevention, diagnosis, and treatment today, while highlighting the gaps and opportunities in PAD research to further reduce preventable complications and deaths for future generations.

The Six Goals of the National Action Plan

- 1 Reach people with PAD and those at risk for PAD by improving public awareness of PAD symptoms and diagnosis.
- 2 Enhance professional education for multidisciplinary health care professionals who care for people with PAD.
- 3 Activate health care systems to provide enhanced programs for the detection and treatment of PAD patients, with a focus on understanding and addressing patient-centered outcomes.
- 4 Reduce the rates of nontraumatic lower extremity amputations related to PAD through public outcome reporting and public health interventions.
- 5 Increase and sustain research to better understand prevention, diagnosis and treatment of PAD.
- 6 Coordinate PAD advocacy efforts to shape national policy and improve health outcomes.

Fact Sheet: Peripheral Artery Disease

References

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