

Types and Incidence of Cardiovascular Disease in the United States Hypertension: 75,000,000 Coronary heart disease: 25,155,000 Myocardial infarction: 790,000 Heart failure: 6,500,000 Stroke: 7,950,000 Because of comorbidities, it is not possible to add these numbers together to reach a total (American Heart Association [AHA], 2010; blood pressure. Intracellular microcalcification occurs, forming deposits within the vascular smooth muscle cells of the surrounding muscular layer (Fig. Decreased NO is a factor in the endothelial cell dysfunction that disrupts vascular balance and can result in vasoconstriction, platelet activation, leukocyte adherence, and vascular inflammation. Once in the tissue, monocytes evolve into a specialized type of macrophage called a foam cell that ingests oxidized cholesterol and becomes fatty streaks in these vessels. A protective fibrin layer or atheroma forms between the fatty deposits and the artery lining. Atheromas produce enzymes that cause the artery to enlarge over time, thus compensating for the narrowing (32.1).