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**Cardiovascular Disease in the Active Service: Incidence Rates and Implications for
Intervention**

Sophie R. Vincent, Michael A. Schlenk, Brian A. Moore

Abstract

Cardiovascular disease (CVD) is the number one cause of death in the United States. Common risk factors associated with CVD are obesity, hypertension, alcohol use, tobacco use, unhealthy diet, and physical inactivity. Other factors such as genetics, race, age, and gender also play a role in the development of CVD. Based on current literature, the increasing trend of obesity impacts even active-duty military service members who are paid to maintain their physical fitness. Due to the lack of literature surrounding incidences of CVDs in active service members, the present study provides insight into this topic. The present research conducted a retrospective cohort study using the Defense Medical Epidemiological Database to examine incidence rate trends of various CVDs and demographics among active service members between 2016 and 2021. The average incidence rates of CVDs in active service members decreased except for Angina. Specifically, Aortic Aneurysm and tear, atherosclerosis, peripheral vascular disease, stroke, and heart attack incidences decreased (-31.94%, -29.91%, -19.58%, -9.36%, and -3.49%, respectively). However, incidences of Angina increased by 14.77%. The majority of CVDs were most frequently diagnosed among the demographics, senior commissioned officers, >40 in age, black, and married status. The decrease in incidences of CVDs warrants further investigation into the explanations for this decline and continuing implementations of the interventions impacting CVDs among service members.

Keywords: Cardiovascular disease, military, active duty service members, obesity, risk factors