



Vascular Medicine

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# Acute effects of firefighting on arterial stiffness and blood flow

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## Abstract

Sudden cardiac events are responsible for 40–50% of line-of-duty firefighter fatalities, yet the exact cause of these events is unknown. Likely, combinations of thermal, physical, and mental factors impair cardiovascular function and trigger such events. Therefore, the purpose of this study was to examine the impact of firefighting activities on vascular function. Sixty-nine young ( $28 \pm 1$  years) male firefighters underwent 3 hours of firefighting activities. Carotid, aortic, and