

# Limit fire service instructors' exposures per month to reduce risk of cardiovascular disease

May 27 2020

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New research published in *Experimental Physiology* suggests that fire service instructors are at increased risk of cardiovascular diseases due to

higher levels of inflammation in their blood, and so their exposure should be limited to nine exposures per month.

While training firefighters, fire service instructors experience core temperature increases to over 38°C when demonstrating scenarios to firefighters. Fire service instructors experience this physiological strain over ten times more frequently than firefighters. Researchers in the UK found that this causes inflammation that lasts beyond the day of their exposure. This [chronic inflammation](#) may explain the increased precedence of health problems in this group.

The researchers collected [blood samples](#) from 110 fire service personnel and compared fire service instructors to firefighters in terms of markers that indicate increased risk of heart disease. They found elevated levels in the blood of fire service instructors for all the markers they examined.

They speculated that these markers, which indicate inflammation might also be linked to other symptoms that fire service instructors report, such as [mood swings](#), [night sweats](#), fatigue.

Commenting on the study, lead researcher Emily Watkins said:

"By limiting exposure of fight service instructors to nine times per months, the sector will enable the instructors to do their job for as many years as they want, whilst protecting their cardiovascular health."

**More information:** *Experimental Physiology*,  
[physoc.onlinelibrary.wiley.com ... abs/10.1113/EP088386](https://physoc.onlinelibrary.wiley.com/doi/abs/10.1113/EP088386)

Provided by The Physiological Society

Citation: Limit fire service instructors' exposures per month to reduce risk of cardiovascular disease (2020, May 27) retrieved 11 May 2024 from

<https://medicalxpress.com/news/2020-05-limit-instructors-exposures-month-cardiovascular.html>

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