Assessing effectiveness of PFAS exposure control in exposed firefighters

Overview

The aim of this project is to investigate the changes over time in PFAS concentrations in the blood serum of individuals who are known to have elevated exposures to PFAS. Individuals who took part in the first sampling phase of the study:

- 1. were either from exposed communities in Williamtown, Oakey and Katherine or from exposed occupational groups such as firefighters (current and ex-staff); and
- 2. have previously had their blood collected and analysed for PFAS chemicals.

Firefighter Demographics

Total num of firefight cohort pa 22/02/21 - 1

Gender %

Participants would like to know more about:

- Are PFAS levels going down?
- What are the health consequences of PFAS exposure (e.g., cancer concerns)?
- Is blood donation effective in reducing PFAS in your blood?
- Are there things I can do to reduce my levels?

Next steps

- Second blood sample collections are now commencing. This will allow us to further track changes in blood PFAS levels over time.
- Visiting some participants in exposed communities to conduct environmental sampling of air, dust, soil, water and food. This will allow us to identify ongoing exposure pathways and sources of contamination and will assist in recommendations for exposure control.
- Community engagement online forums (combined community and firefighter forums) planned for end part of year (2023)

Age Group

Blood Dor



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ıp %	40% >60	44% 46-60	16% 31-45	<1% 18-30
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Average **Annual Change** in PFAS Levels

Based on 508 firefighters with 2 samples considered (2021-23 and 2018/19)

PFOA

J-77

PFHxS

b-**2**

PFOS

J-6 Z[%] year

