Q&A (Questions and Answers) for Grenfell Firefighter Research Study Report: Assessment of Cancer Biomarkers in the Grenfell Firefighter Cohort Study

Introduction

The Grenfell Tower fire has had a lasting impact on the community. Many residents, survivors, bereaved families, and first responders continue to have questions and concerns about their health and wellbeing. As part of our ongoing commitment to openness and support, we want to share the findings from a recent Research Study that looked at the long-term health of firefighters from across London, some of who responded to the Grenfell Tower fire.

The research team, led by experts from Imperial College London, was asked by the London Fire Brigade to carry out a study into firefighters' health to see what the effect of prolonged and repeated exposure to toxic smoke and chemicals. They worked with researchers at the University of Cambridge to analyse blood samples.

Given the level of interest from the community, we have put together this Q&A, with their help, to provide clear, accessible information about the research and its findings. This Q&A aims to explain the study's findings in straightforward language, answer common questions, and signpost where to find further support or information. We hope this helps everyone in the community understand what the research means, what it does not mean, and what support is available.

It answers common questions, clarifies what the results do and don't show, and points you to trusted sources of help.

Our aim is to support understanding and informed conversations for everyone affected.

Why was this study carried out?

Firefighters often work over months or years in hazardous and dangerous conditions due to the nature of the work they do and may be exposed to toxic smoke and chemicals, especially at large-scale incidents like the Grenfell Tower fire. The study was carried out to look for any early signs of possible health risks, such as cancer, by looking for small changes in firefighters' blood and DNA that might be linked to illness.

Who carried out the study?

A medical team who specialise in work-related lung conditions led this study. This included several organisations:

- National Heart & Lung Institute, Imperial College, London UK
- MRC Toxicology Unit, University of Cambridge, Cambridge, UK
- Cancer Molecular Diagnostics Laboratory, Department of Oncology, University of Cambridge, Cambridge, UK
- Royal Brompton Hospital, London, UK
- London Fire Brigade, London, UK.

What exactly did the researchers look for?

The research team looked for tiny fragments of DNA, (cell-free DNA), in the firefighters' blood. These pieces can appear naturally but sometimes show up when the body is under stress or

unwell. They also checked for any small changes (mutations) in the DNA. Whilst these changes can sometimes happen naturally, they can also be linked to illness including some types of cancer. The presence of these changes in the blood does not mean someone has cancer or will get it.

Medical scientists across the world are undertaking research, to further understand the true meaning of these small changes in the blood and to determine whether they are important indicators of future disease.

Who took part in the study and what did the researchers do?

The study involved 685 London Fire Brigade firefighters some of who attended the Grenfell Tower Fire.

The researchers analysed blood in 342 of firefighters, and performed detailed genetic testing on 261. 228 of the 261 were firefighters who attended the Grenfell Tower fire in some capacity. The aim was to see if there were any blood changes that have been linked to cancer in other research, and whether these changes were more common in firefighters who attended the Grenfell Tower fire.

What did the study find?

Out of the 261 firefighters whose DNA was tested, 11 were found to have a genetic change in their blood. The significance of this finding is unclear.

All 11 had attended the Grenfell Tower fire, either during the incident or in the recovery phase. However, because the number of cases was small and there was no direct comparison group, the researchers could not find a reliable (statistically significant) link between firefighters attending the Grenfell Tower fire (or overall smoke exposure) and having these blood changes.

It is important to point out that having this kind of blood change did not mean that the person had cancer or was going to get it. These changes can also be found in people who have not been exposed to fires, and many people with similar changes never develop any illness.

Did the study follow high quality research (ethical) guidelines?

Yes. The Grenfell Firefighter Study was funded by an independent research charity and sponsored by Imperial College London and approved by the UK Health Research Authority (IRAS 265618; ISRCTN 92425651). Everyone who took part did so voluntarily, and the team handled all samples and data according to strict UK research standards.

Over how long a period did the study take place?

The research team began this work before 2017 and adapted it when the Grenfell Tower fire occurred. The pilot analysis was conducted over several years, culminating in results published in 2025.

Do the study findings apply to other groups of people, including Grenfell residents?

The results cannot be applied (extrapolated) to other populations. This is because firefighters will have been exposed to fire smoke and other hazards on multiple occasions over their career.

Are Firefighters obtaining additional blood tests that will detect cancer early as a result of this study?

The London Fire Brigade have not introduced and currently have no plans to introduce a cancer detection blood test for their staff. They are however monitoring results from new research on this to see how it develops.

Outside of facilitating access to London firefighters for academic research projects, London firefighters are not being given blood tests for cancer screening, either by the London Fire Brigade or through their occupational health provider. The academic research (cancer biomarkers study) is about the effect/results on the group. Individual firefighters were not given the results of their blood tests.

The NHS is not able to offer a cancer detection blood test as part of clinical care to community members because this has not been proven to be a reliable test. However, we will watch the outcome of research trials in progress carefully to see how it develops & support the introduction of testing if it is proven to be reliable.

If Members of the Community Have Health Concerns, There Are Services Set Up to Support Them

1. **For those affected by the Grenfell Tower fire**

   The NHS has dedicated services for survivors, bereaved families, and North Kensington residents. These include physical and mental health support and regular health checks.
   - Visit grenfell.nhs.uk for full details.
   - Call the Grenfell Health and Wellbeing Service on **020 8637 6279** (Mon–Fri, 9.00am–5.00pm.)
   - You can also speak to your GP and let them know you were affected by Grenfell.

2. **For general health concerns**
   The GP practice is available to help with everyday health issues and involve specialist services if needed.

3. **How the NHS monitors community health?**
   Public Health teams regularly review the health of the population to check for patterns in local health conditions. If anything needs attention, the NHS investigates further and acts, where needed. Updates are shared on the Grenfell Health Information Group Updates section of the Grenfell NHS website.

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