

Assessing the effectiveness of PFAS exposure control in exposed communities.

INFORMATION FOR PARTICIPANTS

Investigators: Professor Jochen Mueller and his team at The University of Queensland.

General Information

PFASs (per- and polyfluoroalkyl substances) are manufactured chemicals that are commonly detected at low levels in the blood of many people in the general community. The PFASs in blood come from food, water, dust and everyday products. Some communities in Australia have previously been exposed to higher levels of PFASs due to contamination in the environment.

The current research study aims to measure change in the concentration of PFASs in blood of individuals who may have had higher exposure and to understand what factors are associated with the reduction of PFASs in the blood. Efforts have been made in these communities to control the exposure of PFASs in the environment. By collecting and analysing blood from individuals in these communities at different times, we can determine how effective these efforts to control exposure have been and to better understand why some individuals' PFAS levels reduce faster than others. and, for those people whose PFAS levels are not decreasing as we expect, try to understand why this may be the case.

This study will also help us understand more about the relationship between PFAS levels and levels of other biochemical measurements of health. This study will not provide specific information about an individual's health status. The study is designed to contribute to the broader research into PFAS exposure and their potential association with human health issues.

Why are you being contacted?

You have been invited to participate in the University of Queensland study because you previously participated in The PFAS Health Study conducted by the Australian National University (ANU) during 2016 to 2019.

Eligibility to participate

Adults over the age of 18 years will be eligible to take part in this study if your PFAS levels (from your participation in the PFAS Health Study) are **higher** than any of the cut-off concentrations for the PFASs chemicals listed below. As long as individuals' levels are above at least one of the cut-off values for the three chemicals, they are eligible to take part.

PFASs	PFOA	PFHxS	PFOS
Serum concentration in ng/mL serum	>3.5	>5	>8

These values will be shown in the letter of results you received from the Voluntary Blood Testing Program for PFAS. If you do not have a record of these results from the Voluntary Blood Testing Program for PFAS please contact the PFAS Health Study team at ANU on ph 1800 430 903 or pfas.health.study@anu.edu.au.

If you do not meet the eligibility requirements described above (ie. your PFAS levels are lower than those described), there is still an opportunity to take part in the study. There are a *limited* number of places for individuals with *lower* PFAS levels to be part of a comparison group in the study. If you are interested in being in this group, please let us know when you express your interest.

If you agree to take part in this study

You will be asked to complete a **survey** (either online or paper format) and to provide a **blood sample** at two different times (the first sample in the second half of 2021 and a second sample in the first half of 2023). Your blood samples will be analysed for PFASs. The study team will also measure other common blood chemicals which have previously been shown to change in association with PFASs exposure (e.g. uric acid, blood fats, cholesterol, kidney and liver function and thyroid hormone measurements). Analysis of your blood samples **will not** involve genetic testing.

It is important to note that the study will not provide definitive advice about any individual's health, but the results will contribute to the broader research into and understanding of PFAS exposure levels and their potential association with human health issues. With your permission we would also like to compare your current biochemistry tests and PFAS levels with your previous biochemistry tests and PFASs levels as well as any survey data collected in The ANU PFAS Health Study. The ANU PFAS Health Study Team will provide your previous results directly to us **if** you give permission.

How do you benefit from this study?

Participating in the study will give you the opportunity to have your blood analysed for PFAS chemicals again following your previous participation in the PFAS Health Study, giving you the benefit of being able to track the change in PFAS levels in your blood over time.

You will receive a personal report which will include results of your blood biochemistry tests (i.e. uric acid, blood fats and thyroid hormone levels). Your results will be reviewed by our GP researcher working with our research team. If any of these results are abnormal, the letter that you receive will include a recommendation for you to attend your usual medical service to discuss these results and arrange further review. The study staff will not be able to provide a clinical interpretation of these results because that interpretation requires a full medical history and examination. Your usual medical service will be able to interpret this information for you.

You will also be provided with a summary of your **PFAS levels**. The PFAS level from your first sample will be sent to you within six months after you provide your sample.

At the conclusion of the study (end of 2024), a de-identified summary of the results will be made available. These will be presented at the annual community forum (COVID-19 restrictions permitting) and a report

that summarises these research findings will be sent to all participants. Participants will also receive their own personal summary of their individual PFAS levels over time. Your results will include information to help you compare your PFAS levels with the average results of other people in our general community.

There will be no immediate personal benefit to you from participating in this study. The level of PFASs in any individual's blood is the result of a lifetime accumulation from many different exposures. The main benefit of this study is to add to the body of research to assist us in understanding the reduction of PFASs in blood serum over time and identify factors that lead to faster elimination of PFASs from the blood. Your individual results will show whether PFAS levels in the blood are changing (e.g. reducing) in a way that would be expected with the utilisation of effective controls of PFASs exposure in communities.

Will the information you give be confidential?

Your information will be treated with the utmost confidentiality. All information will be coded when it is collected. Your coding details will be stored separately. All personal information from the consent form will be kept securely and separately from the other material. Your completed survey and blood result details will be stored as de-identified information. Although the outcome of the study may be published in the scientific literature and presented at the community forum, your identity will not be revealed. Your participation in the study and your results will remain confidential.

Do you need to take part in this study?

Your participation is voluntary. You may choose to not participate in this research study and you may withdraw your consent at any time and at any point in the study.

What do I do now?

If you would like to express an interest in taking part in this study, or if you would like more information about this study, please use the link on the covering letter to complete the contact form, call our research team on 1800 370 760 or send an email to PFASstudyUQ@uq.edu.au. We will be able to send more detailed information to you. Your participation is highly valued as it contributes to our scientific understanding of PFAS levels in exposed communities and their health. In particular, our project is designed to contribute to our understanding that can guide exposure reduction in the future.

Contacts

This study adheres to the Guidelines of the ethical review process of The University of Queensland, the Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research and the *National Statement on Ethical Conduct in Human Research*. While you are free to discuss your participation in this study with our project staff (Project Coordinator Jochen Mueller (07) 3343 2450 or you can call 1800 370 760), if you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Coordinators on (07) 3365 3924 or email humanethics@research.uq.edu.au.