

PFOS Testing for Eligible Residents: Guidance for GPs

Summary

The Government of Jersey is providing blood testing in 2022 to eligible Islanders who may be affected by the historic use of PFOS at Jersey Airport. The testing will identify levels of PFOS in the blood and is being organised by Public Health. This guidance is to support GPs in discussions with their patients on the benefits of testing and to explain the process for testing, including the GPs role. Please read this carefully.

Background

PFOS use in Jersey: In Jersey, there was historic use of fire-fighting foams that contained PFOS at the airport for training purposes. This occurred before the environmental significance of PFOS was understood. As a result, some private water supplies were contaminated. At the time that this was first identified, sampling and associated remedial work was undertaken in the environment. [1] Some Islanders are concerned about the associated health effects of PFOS exposure.

Evidence of health impact of PFOS/PFAS: Despite growing international interest in the health consequences, it is difficult to interpret the evidence between PFOS and associated health impacts.

There is some evidence suggestive that exposure to PFOS/PFAS can be associated with increased blood cholesterol, although, the differences are small and may not be significant to individual-level health. [2] Evidence for other adverse health outcomes are generally limited, but these conditions include:

- Higher levels of uric acid in the blood [3], reduced kidney function [4] or kidney disease or kidney cancer [3]
- Testicular cancer [3]
- Alterations in immune response, specifically impacts on vaccine derived immunity for diphtheria and rubella [3]

Other health conditions have been studied are mentioned in the literature about PFOS but the evidence is low quality and therefore difficult to interpret. More information can be provided by Public Health on request.

There are methodological challenges around determining the health impacts of environmental contaminants because of correlated exposures, small relative risk of disease attributed to exposure [5], and the inability to undertake randomised controlled trials. In the case of PFOS/PFAS there is additionally the ubiquitous nature of the contaminant therefore meaning that most populations would be expected to have some level of PFOS/PFAS in their blood.

Given the lack of evidence about health effects of PFOS/PFAS exposure, it is important that patients experiencing symptoms receive usual care for their symptoms and that other diagnoses should be excluded through routine investigation.

Evidence suggests that people who live in areas affected by PFOS/PFAS exposure have psychological stress and anxiety associated with exposure, and so please be mindful of this when dealing with patients.

PFOS blood testing: The way the testing for PFOS/PFAS is undertaken is incredibly important to get a reliable result. PFOS/PFAS is present in many common products such as test tubes and gloves, so it is very important that the blood is sampled appropriately and processed in a certified laboratory to ensure that the samples are not contaminated. For that reason, the blood tests will be conducted in a specific session with a dedicated phlebotomist.

Only certain laboratories have information on a reference population which means that test results can be compared to other results. This will allow us to conclude whether Islanders' results are low, normal or high.

The laboratory we have chosen, Vista Analytical Laboratory, has an excellent reputation internationally for PFOS/PFAS testing and an ability to test for a wide range of PFOS/PFAS substances.

Treatments for PFAS exposure: There are no known interventions for removing or reducing PFOS/PFAS from the blood. There may be treatments in the future, but this is not clear currently. In 2021, a study protocol was published in the BMJ for an Australian study (randomised controlled trial) to test whether blood donation every 12 weeks, or plasma donation every 6 weeks, could lower PFOS/PFAS levels. The results of this trial are outstanding.

Jersey Testing Decision

Testing decision: The Government of Jersey understands that some residents are distressed by the pollution incident and may choose to be tested. Therefore, the Government of Jersey will offer testing for those who were affected by the historic use of PFOS at Jersey, and Public Health will ensure that testing is performed to the best possible standard.

Eligibility criteria: Islanders will need to meet eligibility criteria for PFOS testing. They must have:

- Lived in the historical plume area between 1991 and 2006 for more than 1 year, **OR** worked in the historical plume area between 1991 and 2006 for more than 2 years, **AND**
- Regularly consumed water from a borehole in the area, **AND**
- Have at least one symptom that is consistent with the health concerns that are related to PFOS (please see above), **AND**
- Have a GP referral for testing, signed and dated by both the resident and the GP

Process for testing

Owner	Action	Date / deadline
GP	Eligible patients should be given the accompanying information leaflet The referral form should be completed and signed by both the referring GP and the resident, and emailed to publichealth@gov.je	Referrals to be received by 16 March 2022
Public Health	All referrals will be reviewed to ensure they meet the eligibility criteria and the GPs will be contacted within 2 weeks to confirm whether the referral has been accepted	30 March 2022
GP	Residents that have been accepted for referral will require a blood test form; these should be written and left with reception after the referral acknowledgement has been provided	30 March 2022
HCS	A dedicated phlebotomy clinic will be arranged after referrals have been reviewed. GPs will be contacted with details of when the testing will be available	11 May 2022
HCS	It is expected that results will take up to 8 weeks after the samples have been sent to the laboratory in the USA. Results will be sent to HCS, checked, and sent to GPs and anonymous information shared with Public Health for monitoring purposes.	13 July 2022
GPs	Results to be shared with residents through their GP	20 July 2022

GP fees for testing

The Government of Jersey has agreed to fund testing for eligible residents. This funding includes the tests themselves, phlebotomy clinic, and up to two GP appointments - one for the referral and one for provision of results.

For more information

For more information, please see the Government of Jersey reports from [2019](#) and [2020](#) or the Australian PFAS Health Study, [here](#).

If you have any questions about PFOS testing, please contact publichealth@gov.je

References

- [1] Government of Jersey, "PFAS and water quality in Jersey 2019: An interim report from Officer Technical Group," 2019.

- [2] Australian National University, "PFAS Health Study: Overall Summary," 2021.
- [3] Kirk, M., Smurthwaite, K, Braunig, J, et al, "The PFAS Health Study: Systematic Literature Review," Canberra: The Australian National University, 2018.
- [4] PFAS Expert Health Panel, Australia, "Expert Health Panel for PFAS: Summary," 2018.
- [5] Pekkanen, J., & Pearce, N., "Environmental Epidemiology: Challenges and Opportunities," *Environmental Health Perspectives*, vol. 109, 2001.