Public Health Jersey

Minister for Health and Social Services

Government Response

PFAS Scientific Advisory Panel Report 3 - Testing, biomonitoring and management of PFAS in the human body

September 2025 (Updated in October 2025)

Improve. Prevent. Protect.

Executive Summary

The independent PFAS Scientific Advisory Panel have recently given the Government of Jersey their third report. It looks into testing, re-testing and management of PFAS in the human body. The report focuses on the people living around the airport where higher levels of PFAS in their blood have been found. These people were exposed by drinking water from private water supplies which had been contaminated by the historical use of PFAS-containing firefighting foams at the airport.

This report gives a summary of the Panel's findings. The panel reviewed scientific research from around the world, experts in their field, and experts by experience from Jersey. Based on this, they have advised that a medicine called bile acid sequestrants should be offered to some of the Islanders tested in 2022. The report explains why they made this decision.

The panel provided a number of recommendations to the Government of Jersey. The Minister for Health and Social Services agrees with the report and supports the recommendations in full or in principle.

In this document, each of the recommendations is explained in turn, with the background, Panel's wording of their recommendation, and the Government of Jersey's response and actions to each.

Public Health Jersey

Visual Summary

PFAS Scientific Advisory Panel

Government of Jersey

Laboratory testing

Make sure the laboratory that is used for PFAS testing is accredited and there is a full chain of custody.

GoJ agrees with the recommendation and will use an accredited testing facility

Testing

Test all eligible islanders who live in the plume area who haven't already been tested.

We will test Islanders who are eligible.

Test Islanders who worked with PFAS containing Aqueous Film Forming Foam (AFFF) such as Firefighters

Occupationally exposed Islanders will be offered testing.

Anonymous Testing

Conduct anonymous baseline testing.

Baseline testing will be postponed until after Report 4 published.

Cholesterol

Consider testing PFAS exposed Islanders for cholesterol.

GoJ will encourage clinicians such as GPs to test for cholesterol.

Risk of Cancer

Have a higher level of suspicion of kidney or testicular cancer in PFAS exposed people.

GPs and hospital doctors will have training on PFAS.

Information sheets on PFAS will be produced to help GPs manage patients with PFAS exposure.

Promote testicular self-examination in PFAS exposed populations.

Testicular self-examination is already recommended in Jersey. There will be a campaign in 2025 to encourage self-examination.

Public Health Jersey

PFAS Scientific Advisory Panel

Government of Jersey

Make colesevelam available for women who want to have children soon with >10ng/ml PFAS.	**Colesevelam for women >10ng/ml**	GoJ agrees and will make colesevelam available to eligible women, subject to a clinical assessment
Make colesevelam available for those with high cholesterol and PFAS >20ng/ml on a case-by-case basis.	**Colesevelam for those with PFAS >20ng/ml**	GoJ agrees and will make colesevelam available to eligible Islanders subject to a clinical assessment
Make colesevelam available for those with PFAS >20ng/ml and exceptional benefit on a case-by-case basis.		GoJ agrees and will make colesevelam available to eligible Islanders subject to a clinical assessment
Phlebotomy should be offered as a second line intervention where colesevelam cannot be tolerated.	**Phlebotomy**	GoJ agrees to make phlebotomy available for those who cannot tolerate colesevelam. There will be a delay in setting up this service.
Those on interventions should have regular blood tests.	**Regular blood tests**	Regular blood tests will be offered through the hospital to check the effectiveness of the intervention.
When background level is reached, stop the intervention.	**Stop level**	Stop level will be based on an individual discussion with the doctor, and will be set at no lower than 7ng/ml.

Foreword from Deputy Tom Binet, Minister for Health and Social Services

I welcome the publication of the PFAS Scientific Advisory Panel's third report into testing, biomonitoring and management of PFAS in the human body. In response, we have taken quick action to respond to the recommendations in the report. Since receiving the report from the Panel, the Water Quality and Safety Board heard from Public Health on several occasions, who presented a series of measures in response to the recommendations that we received. I am pleased that the Board was able to make informed decisions on the way forward for Islanders, the detail of which is presented in this Government Response report.

I am committed to providing the clinical services described in this report at the earliest opportunity. As we move forward, our officers will be working extremely hard to put these services in place without delay. Practical details such as how to opt in and when the service will start, will all be determined shortly, and shared as soon as possible. I would like all islanders to rest assured that this is a high priority activity, and that I, and everyone else involved in the process is committed to their health and wellbeing.

I'm grateful to Islanders for their engagement with the Panel during their work on Report 3, and their valued contributions and constructive feedback on the draft report. Thanks also to the Panel for their work, and all of our officer's for their actions in response.

We will be hosting a public meeting at 6:30pm on 10 September at Les Quennevais School to discuss this response to the Panel's report and answer questions from the public. Please do attend if you have any questions on the report or Government's response.

Introduction

The PFAS Scientific Advisory Panel have recently presented their third report to the Government of Jersey. This report covers testing, biomonitoring and management of PFAS in the human body. It follows on from their second report which identified health harms associated with hotspot (high) levels of AFFF firefighting foam. The summary of Report 2 can be found in Appendix 1 of this report for reference.

In the report, the Panel listened to several Subject Matter Experts from around the world about testing and ways to reduce PFAS blood levels. They looked at scientific research from around the world to find out what other places are doing to address this matter. They also heard from 'Experts by Experience' who are affected Islanders who have got first-hand experience related to the topics discussed in the Panel's report.

Islanders have also had an opportunity to comment on the draft report produced by the Panel. A draft of Report 3 was shared with Islanders in April 2025 and Islanders shared their comments. These were included in Appendix 2 of the report and some changes were made based on the feedback.

While the Panel found that high levels of PFAS in the blood are linked to some health problems, as they explain in their third report, it's not possible to predict a person's health issues based on their blood PFAS levels. Also, if a person has one of the health conditions listed in the Panel's Report 2, it is not possible to say whether it was caused by PFAS or not.

It is also not possible to know whether someone's health might improve by lowering those levels, as this has not yet been tested scientifically. Still, the Panel believes that people should be exposed to as little PFAS as practical, especially the types found most often in blood due to AFFF exposure. They will make suggestions for how to do this in their fourth report about PFAS and the environment.

Arcadis Hydrogeological Survey report

Earlier this year, a report prepared by Arcadis, commissioned by the Government of Jersey was released. This report gives a detailed understanding of the environmental pathways and extent of PFAS contamination around the airport. The full report and Government response to the report can be found at www.gov.je/PFAS. The report contains a map of the area which Arcadis define as the "plume" area, and on which decisions have been made in this document. It has been reproduced in Appendix 3 of this document.

Report 4

The PFAS Scientific Advisory Panel are currently working on their fourth report into PFAS in the environment. The first focus of this report is to look at water treatment and regulations to keep drinking water safe. A draft for public consultation was presented to Islanders in August 2025. The second phase of the report will investigate PFAS in other sources, such as food, soil and waste. This will provide much more information about PFAS in the rest of Jersey, outside of the hotspot area which Reports 1, 2, and 3 have focused on so far. More details on Report 4 can be found in Appendix 4.

Government of Jersey response to the Panel's third report

This Government of Jersey response explains what the Panel found in their report, and what the Government of Jersey will do for Islanders in response to the Panel's findings.

The main sections are:

1. Testing for PFAS in blood
2. Screening for potential disease related to PFAS exposure
3. Potential interventions to reduce PFAS body burden

The recommendations from the Panel and actions proposed in this response are all only designed for Islanders who have been impacted by hotspot levels of PFAS around the airport. The wider Islanders are not in scope.

1. Testing for PFAS in blood

1.1. Testing for people who live or lived around the airport

In 2022, PFAS testing was offered to people who had lived or worked around the airport between 1991 and 2006, and had regularly consumed water from private supplies, and who had symptoms possibly linked to PFAS exposure. To get a fuller picture of the exposure in this population, and for potentially affected Islanders to understand their PFAS levels, the Panel thought it would be advisable to extend that sampling programme to others in the same area, with or without any symptoms. It also includes people who are now in the affected area, based on the new information in 2025, even though they weren't eligible before.

The Panel recommended that:

PFAS testing be offered to those who met the 2022 PFAS testing criteria but did not choose to participate in the programme and also to those who did not have a relevant condition or symptoms but met the other criteria for the 2022 programme. This includes any wider area of contamination that is identified through commissioned environmental assessments.

The Government accepts this recommendation and will implement testing for potentially affected Islanders. A service will be set up through the hospital for people who opt in and meet the eligibility criteria. The eligibility criteria are:

- Anyone who routinely drank from a private water supply (e.g. borehole or well) since 1991 for 1 year or longer, in the plume area defined by Arcadis in 2025

AND

- Has not previously been tested for PFAS by Government of Jersey

AND

- Has completed the eligibility and exposure questionnaire.

Islanders who have never used or drunk borehole water in the plume area are not eligible for this service. This is because the risk is linked to drinking contaminated private water supplies and not just living in this area and drinking mains water.

People who believe they are eligible will need to opt in and complete an eligibility and exposure questionnaire. If they are eligible, they will be offered an appointment with a doctor. During this appointment, the doctor will explain what the PFAS test means, the pros and cons of getting tested, what results might mean for health, and what could happen next. If the Islander wants to be tested, an appointment will be made with a specialist nurse to take a blood sample. Once the results come back, they will have an appointment with a doctor to receive their results and what that means for them.

1.2 Testing for occupational exposure

The Panel noted that there were some who were people who could have been exposed to PFAS through their work. For these individuals, blood testing would be appropriate to see if their PFAS levels are high.

The Panel recommends that:

PFAS testing be offered to those who worked as firefighters during the period when firefighting foams containing PFAS of concern were in use, and to those who were involved in the transport, loading or cleanup of the concentrates, solutions or foams or in servicing or maintaining machinery or facilities contaminated with the foams as part of their job.

The Government accepts this recommendation and will implement testing for potentially affected Islanders. A service will be set up through the hospital for people who opt in and meet the eligibility criteria. The eligibility criteria are:

- Had exposure to AFFF through their work between the years of 1970 and 2012. Occupations include (but are not limited to):
    - Firefighters
    - Fire truck mechanics
    - Hand-held fire extinguisher maintenance and technicians
    - Environmental restoration and clean up staff

AND

- Has not previously been tested for PFAS by Government of Jersey

AND

- Has completed the eligibility and exposure questionnaire.

People who believe they are eligible will need to opt in and complete an eligibility and exposure questionnaire. If they are eligible, they will be offered an appointment with a doctor. During this appointment, the doctor will explain what the PFAS test means, the pros and cons of getting tested, what results might mean for health, and what could happen next. If the Islander wants to be tested, an appointment will be made with a specialist nurse to take a

blood sample. Once the results come back, they will have an appointment with a doctor to receive their results and what that means for them.

1.3 Re-testing for Islanders tested in 2022

The Panel considered whether re-testing for the 2022 islanders should be offered. International re-testing has been done only for research purposes. Individual PFAS levels can vary based on whether someone is dehydrated, recently donated blood or had surgery, so can be difficult to interpret re-testing results, and testing can add to uncertainty or anxiety. The Panel did not recommend re-testing in Report 3 and will review re-testing as part of Report 4 into environmental management that is expected in late 2025.

1.4 Background testing

In environmental contamination events, it's common to test people who aren't believed to be affected. This gives a baseline to compare with those who were exposed. In the case of PFAS, it helps show the difference between people with high exposure and those with lower levels, since PFAS is found almost everywhere. Testing people in the background group also helps decide if environmental action is needed and can help set a level at which any intervention should stop. The Panel recommends that:

Background levels of PFAS in the wider community, by parish, be estimated either by the analysis of altruistic blood donation samples, or excess serum collected to perform other tests, or by other means. This should be undertaken on an anonymous basis but with the age, sex and Parish of residence recorded.

The Panel also considered non-anonymous wider population testing and found that systematic population testing is uncommon outside of contamination zones around the world because it is expensive, difficult to interpret at the individual level and may cause anxiety, and because little is known about the health impacts of lower levels of exposure. The Panel will review wider population testing as part of Report 4 into environmental management that is expected in late 2025. More details in Appendix 4 and on gov.je/PFAS.

The Government have considered anonymous testing very carefully and have decided that background testing cannot be implemented at this time for the following reasons.

- It would not be possible to provide a PFAS test result to anyone participating in anonymous testing. The Government of Jersey feels that this not acceptable for Islanders as they have the right to know their test results if conducted.
- Anonymous testing would be unacceptable to some Islanders due to not receiving their blood test result.
- When investigating whether anonymous testing could be implemented, significant concerns were raised about the ethics of testing blood anonymously without explicit and informed consent from the individual.
    - Background testing is typically done with informed consent from the participants to be tested, rather than being done anonymously. The only time that anonymous testing for PFAS has been done internationally was in a research

study which was funded by a PFAS manufacturer. This is not a model that Jersey is prepared to follow.

- Blood testing as part of a full research study in Jersey would not be possible because of the size of our Island and the capacity in the hospital. We do not have the required checks and research committees in place to make sure research is done correctly.

1.5 Testing validity

PFAS testing is a specialist task and so it is important that the results are as valid as possible. The Panel have provided guidance to ensure that any testing programmes in Jersey are done to a high standard.

The Panel recommends that:

PFAS testing should be conducted at laboratories that have been accredited for assessing PFAS levels in human samples, with a full chain of custody and evidence of prevention of contamination from the point of sampling to the completion of the analytical testing. This is a prerequisite for test results to be considered valid.

The Government accepts this recommendation and will ensure that the testing provided by Government will meet these criteria.

2. Screening for potential disease related to PFAS exposure

The Panel reviewed whether screening should be put in place for the diseases that they found in Report 2 were associated with high levels of PFAS exposure. This included cholesterol, kidney cancer, testicular cancer, and reduced vaccine efficiency in children. These will be discussed in turn.

2.1 Cholesterol

In Report 2, the Panel found that there was a consistent finding in the research literature of a modest (5-10%) increase in 'bad' cholesterol. For most people, this would not change their disease risk category, but for some it could.

The Panel recommends that:

Clinicians, when seeing people with proven elevated serum PFAS, should consider testing for serum cholesterol.

The Government accepts this recommendation. Affected Islanders who have been seen through the Clinical Review Service should already have been assessed for whether cholesterol testing is appropriate for them. Affected Islanders who are seen through the Extended PFAS Clinical Service can be tested for cholesterol. GoJ will make training and

guidance available for GPs and hospital doctors about PFAS. This will include information about cholesterol testing.

2.2 Kidney cancer

In Report 2, the Panel found that hotspot levels of PFAS (average 250 ng/ml in Ronneby, Sweden) were associated with an increase in kidney cancer. In Ronneby, the extra risk of developing kidney cancer was 20%. Because this is not a common cancer, this extra risk is unlikely to mean there are lots of extra people who get kidney cancer at some point in their entire life. The lifetime risk of developing kidney cancer in males increased from 2.6% for the general public to 3.2% for people exposed at hotspot levels. For females the increase in lifetime risk is from 1.5% to 1.8%. While the chance of an individual developing cancer is still low, each case of cancer is very significant for the people that it affects so it is important that action is taken early in people at increased risk.

In Report 3, the Panel considered whether kidney cancer screening should be implemented for people with high PFAS levels. Screening for any disease is only recommended in certain circumstances. One important criteria is that there is a test that is easy to perform and is accurate. Unfortunately, there is not a simple test for kidney cancer which means that large numbers of people would have to be tested to find each potential case of cancer. Urinalysis for microscopic blood tends to produce many false positives (99% of positive tests are in people who don't have kidney cancer). Ultrasound can be used, but the Panel found that this would lead to high costs and increased anxiety without evidence of improved health outcomes for Islanders. Therefore, the Panel did not recommend screening for kidney cancer but did make an alternative recommendation.

The Panel recommends that:

That when people who know or believe they have elevated serum PFAS exhibit symptoms which are consistent with kidney cancer or testicular cancer, clinicians should have a higher level of suspicion of cancer than in unexposed populations.

The Government accepts this recommendation. Government of Jersey will make training and guidance available for GPs and hospital doctors about PFAS. This will include information about being aware of the slightly increased risk of kidney cancer in people affected by the PFAS contamination.

2.3 Testicular cancer

In Report 2, the Panel found that hotspot levels of PFAS (average 250 ng/ml in Ronneby, Sweden) were associated with an increase in testicular cancer. In Ronneby, the extra risk of developing testicular cancer was 20%. Because this is a rare cancer, this extra risk is unlikely to mean there are many extra people who get testicular cancer. The lifetime risk of developing testicular cancer increased 0.45% for the general public to 0.54% for people exposed at hotspot levels. While the chance of an individual developing cancer is still low, each case of cancer is very significant for the people that it affects so it is important that action is taken early in people at increased risk.

In Report 3, the Panel considered whether testicular cancer screening should be implemented for people with high PFAS levels. They reported that because testicular cancer is rare, screening is not effective. Therefore, the Panel did not recommend screening but did make two other recommendations.

The Panel recommends that:

That when people who know or believe they have elevated serum PFAS exhibit symptoms which are consistent with kidney cancer or testicular cancer, clinicians should have a higher level of suspicion of cancer than in unexposed populations.

The Government accepts this recommendation. GoJ will make training and guidance available for GPs and hospital doctors about PFAS. This will include information about being aware of the increased risk of testicular cancer in people affected by the PFAS contamination.

The Panel recommends:

That promoting regular testicular self-examination should be considered in PFAS-exposed populations.

The Government accepts this recommendation. GoJ will run a campaign to promote regular testicular self-examination in 2025.

2.4 Reduced vaccine efficiency in children

Exposure to PFAS has been linked to a lower antibody response to childhood vaccines. However, no rise in diseases that vaccines prevent has been seen. This might be because these diseases are rare, and vaccination in the general population creates herd immunity. Herd immunity helps protect children exposed to PFAS, even if their antibody response to vaccines is weaker.

3. Potential interventions to reduce PFAS body burden

PFAS levels in the blood go down once people stop being exposed in the environment. This is because the body gets rid of PFAS naturally through urine and faeces, but it can take many years. For the people affected by the airport contamination, their exposure likely dropped when mains water was provided in the 2000s. Because of this, the Panel believes their PFAS blood levels have already been going down from higher levels in past years.

The Panel looked at the evidence for many different interventions that could reduce PFAS levels. They found that taking a type of medication called ‘bile acid sequestrants’ is the fastest way to reduce PFAS levels. Phlebotomy was also faster than not having an intervention but was much slower than bile acid sequestrants.

3.1 How the interventions work, side-effects and the research on humans

3.1.1 Bile acid sequestrants

How they work: Bile acid sequestrants are a type of cholesterol-lowering medication which has been in use in medicine for over 50 years. They work by binding to bile acids in the intestines which is then excreted from the body. They also bind to PFAS and remove it in the same way.

Side effects: There are side effects of these medications. It is common to experience constipation, gastrointestinal discomfort, headaches, nausea and vomiting. They can also stop essential nutrients and some other medication from being absorbed. This includes the oral contraceptive pill, which becomes less effective and may not prevent pregnancy if taken with bile acid sequestrants. Colesevelam is the name of the easiest bile acid sequestrant to take and has fewest side effects.

Human studies: Scientific evidence from around the world for using bile acid sequestrants to treat PFAS exposure is still very new. There have been two intervention studies published on the topic. In 2013, a very small study with 8 participants all from the same family was published. The participants took the medication for one week. The study reported the impact of the intervention on levels of PFAS in faeces rather than blood, because blood PFAS was not expected to reduce with such a short timeframe. In 2024, a randomised controlled trial with 45 participants was published. In this study, bile acid sequestrants were given for 12 weeks. There are no studies that have looked at the use of bile acid sequestrants for PFAS removal for longer than 3 months.

Bile acid sequestrants are not licensed for removal of PFAS, but this does not mean that they cannot be used for this purpose. Giving off label medication is common practice in medicine. There are no figures for off label medicine use in the UK, but in the US, a study estimated that up to 25% of medicines are prescribed off-label.

3.1.2 Phlebotomy

How it works: Phlebotomy is where blood is removed from the body. When blood is removed, the PFAS in the blood is removed also. Then the body makes more blood, and that blood does not contain PFAS.

Side effects: There are side effects of phlebotomy. These include risks such as discomfort and pain, dizziness and light-headedness, bruising. In rare cases it can cause damage to arteries or nerves in the arm, or an infection caused by bacterial contamination. The international scientific evidence for phlebotomy as an intervention for PFAS is in its infancy.

Human studies: There have been two intervention studies published on the topic. In 2014, a very small study of 6 participants all from the same family was published. In 2022, a randomised controlled trial was published which had 95 participants that received phlebotomy.

3.2 How effective the interventions are

Each type of PFAS (e.g. PFOS, PFHxS) takes a different amount of time to reduce naturally and with each intervention. The following paragraphs explain how long it takes, on average, for PFOS and PFHxS to reduce by half without intervention, with bile acid sequestrants, and with phlebotomy.

PFOS: Without an intervention, it takes 36 months for PFOS to reduce by half. With bile acid sequestrants it takes less than 2 months. With phlebotomy it takes 22 months. Phlebotomy is faster than not having an intervention, but it is much slower than bile acid sequestrants. Bile acid sequestrants are nearly 12x faster than phlebotomy at reducing PFOS levels.

PFHxS: Without an intervention, it takes 54 months for PFHxS to reduce by half. With bile acid sequestrants it takes 9 months. With phlebotomy it takes 27 months. Phlebotomy is faster than not having an intervention, but it is much slower than bile acid sequestrants. Bile acid sequestrants are 3x faster than phlebotomy at reducing PFHxS.

PFOA: Without an intervention, it takes 30 months for PFOA to reduce by half. With bile acid sequestrants it takes 6 months. With phlebotomy it takes 19 months. Phlebotomy is faster than not having an intervention, but it is much slower than bile acid sequestrants. Bile acid sequestrants are 3x faster than phlebotomy at reducing PFOA.

3.3 Do interventions improve health outcomes?

The Panel looked for evidence about whether reducing PFAS levels improves health outcomes, such as reducing cholesterol. The only study that looked at health outcomes was the randomised controlled trial of firefighters in Australia. This found that after a year of phlebotomy or plasma donation, there were no differences in cholesterol levels, thyroid, liver or kidney function.

3.4 Summary of the evidence

The Panel found evidence that bile acid sequestrants can lower PFAS levels in the blood. They also work faster than phlebotomy. However, these medicines haven't been widely tested. The published research on bile acid sequestrants is based on only 53 people, and for phlebotomy, 101 people. Both medicines can have side effects and carry risks. So far, no studies have shown that lowering PFAS levels actually improves health. Because of this, the Panel recommended that these medicines should only be offered in specific situations.

3.5 PFAS levels for intervention

There is no international agreement about what level of PFAS may result in health harms or at what level of PFAS should be intervened at, because this is still a new field of scientific study.

The Panel considered what level of PFAS exposure should be required to be eligible for an intervention. The Panel reported in Report 1 that the German Environment Agency had established levels where there could be risk to health. For women of childbearing potential

this was 5ng/ml PFOA and 10ng/ml PFOS, and for other populations, 10ng/ml PFOA and 20ng/ml PFOS. These levels do not include PFHxS, which is the type of PFAS at highest levels from the 2022 testing. They reported that in the USA, the National Academy of Sciences considered total PFAS levels of 20ng/ml – which did include PFHxS - could be associated with health risk, with risk at lower levels for vulnerable people.

The intervention studies started with different PFAS levels. In the two studies using bile acid sequestrants, starting PFAS levels were 81 ng/ml and 201 ng/ml. In the phlebotomy studies, the starting levels were 174 ng/ml and 15.3 ng/ml. The study with the lowest starting level (15.3 ng/ml) did not find clear reductions in PFHxS or PFOA—only PFOS showed a drop. The authors believe this may be because the starting PFAS level was too low to detect bigger changes.

The Panel also noted that almost 20 years had passed since the main PFAS exposure near the airport ended. They expected that PFAS levels in the affected Islanders had dropped during that time. Because of this, the blood levels measured in 2022 likely do not reflect the full amount of PFAS exposure the group had in the past. Taking all of this information into account, the Panel set precautionary levels for start levels for the intervention. These recommendations are different for different groups of people, so are discussed more below.

3.6 Interventions for women of childbearing potential

In Report 2, the Panel found that women can pass PFAS on to children during pregnancy and breastfeeding.

Breastfeeding is very protective for infants' health and protects them from infections and other diseases including diarrhoea and vomiting, sudden infant death syndrome, obesity and cardiovascular disease in adulthood. The Panel described the benefits as "profound and widespread" and recommended that breastfeeding should be promoted in PFAS-exposed populations because the benefits are so significant.

If PFAS levels were reduced in women who intend to have children, this would mean that PFAS exposure would be reduced for their future children. The Panel determined that the start level of the intervention should be precautionary.

The Panel recommends:

That Colesevelam be made available, on a case-by-case basis, to women of childbearing potential (who are not currently pregnant nor planning to be pregnant during any course of treatment) who have been found to have a total across 8 measured PFAS compounds (PFHxS PFOS PFOA PFHpS PFNA PFPeS PFDA MeFOSAA) of at least 10 nanograms per millilitre of blood serum. Those eligible should receive information explaining the potential impact of PFAS exposure on future offspring and the potential risks and benefits of intervention, so they can make an informed choice about whether they wish to take Colesevelam. This intervention should be offered early in life, ideally, completing the course several months before planning a pregnancy, and appropriate advice about contraceptive methods and dietary supplementation given.

The Government accepts this recommendation. Women of childbearing potential who had a Government of Jersey test with a PFAS level of 10ng/ml or more will be offered an appointment with a doctor. The doctor will explain the benefits and risks of Colesevelam, including side effects and how it might interact with other medicines. For example, oral contraceptive pills may not be as effective at preventing pregnancy if taken at the same time as colesevelam. For anyone wanting to go ahead with the intervention, another PFAS test will be done to see if they are eligible.

If they are eligible, they will be given a prescription for Colesevelam from the hospital pharmacy. They will need to collect prescriptions from the hospital pharmacy every 3 months. While taking the medication, they will have regular phone calls with the nurse and blood tests to track how their PFAS levels change. PFAS tests will be done after 6 months then 12 months of starting the medication, and then annually thereafter. There will also be a PFAS test 12 months after stopping taking the medication.

3.7 People with high cholesterol

The first treatment for high cholesterol today is statins as they have fewer side effects. The Panel noted that bile acid sequestrants were used to treat high cholesterol in the past. Because of this, the Panel saw a possible extra benefit for people with high PFAS levels who also have high cholesterol. These drugs might help lower cholesterol further, along with any other medications the person is already taking.

The Panel recommends that:

Colesevelam be considered by clinicians as a lipid lowering therapy in people who have elevated cholesterol and who have been found to have a total across 8 measured PFAS compounds (PFHxS PFOS PFOA PFHpS PFNA PFPeS PFDA MeFOSAA) of at least 20 nanograms per millilitre of blood serum.

The Government accepts this recommendation. GoJ will make training and guidance available for GPs and hospital doctors about PFAS and this will include information about the additional benefit of Colesevelam for reducing PFAS levels in people with high cholesterol. GPs will be reminded that colesevelam should not be used as an alternative cholesterol lowering medication, but used alongside more effective, newer medications such as statins.

3.8 Other people with high PFAS

There may be some people identified through Government of Jersey blood testing who do not meet the previous categories and are keen to talk to a doctor about whether they would be suitable for Colesevelam.

The Panel recommends that:

Clinicians consider, for people who have been found to have a total across 8 measured PFAS compounds (PFHxS PFOS PFOA PFHpS PFNA PFPeS PFDA MeFOSAA) of at least 20 nanograms per millilitre of blood serum, where there is an exceptional benefit from the prescribing of Colesevelam for that person on a case-by-case basis.

The Government accepts this recommendation. People who had a Government of Jersey test with a PFAS level of 20ng/ml or more will be offered an appointment with a doctor. The doctor will explain the benefits and risks of Colesevelam, including side effects and how it might interact with other medicines. For anyone wanting to go ahead with the intervention, another PFAS test will be done to see if they are eligible.

If they are eligible, they will be given a prescription for Colesevelam from the hospital pharmacy. They will need to collect prescriptions from the hospital pharmacy every 3 months. While taking the medication, affected Islanders will have regular phone calls with the nurse and blood tests to track how their PFAS levels change. PFAS tests will be done after 6 months then 12 months of starting the medication, and then annually thereafter. There will also be a PFAS test 12 months after stopping taking the medication.

The Government note that the Panel have included the criteria of people needing to meet the criteria of ‘exceptional benefit’. This refers to the NHS principle of ‘exceptionality’. This is a process to enable people to be considered for treatments that are not normally funded by the NHS. It means that doctors need to explain how their patient is different to the people the treatments are not available for, and how they will get more benefit than others would.

Government recognises that Islanders affected by the hotspot are different to the rest of the Island because of their historic high exposure to PFAS and could gain more benefit from Colesevelam. Therefore, people who have previously lived or currently live in the plume area defined by Arcadis in 2025 and drank from private water supplies are considered ‘exceptional’ and can be offered an intervention.

3.9 Phlebotomy

The Panel has found evidence that Colesevelam is much more effective than phlebotomy and also has lower risks. For this reason, Colesevelam will be the intervention that is offered for elevated PFAS. There may be some people who are not able to take Colesevelam because of another medical issue that means they can’t take it (known as a clinical contraindication) or because they experience some of the rare side effects, such as inflammation of the pancreas.

The Panel recommends that:

Only for those people who otherwise meet the criteria for an intervention (other than the elevated cholesterol criterion) but for whom Colesevelam is not an appropriate intervention (due to adverse reaction or clinical contraindication), should therapeutic phlebotomy be considered as a second line offer.

The Government accepts this recommendation in principle. It is Government's priority to set up the service in which affected Islanders can be considered for Colesevelam, as it is the more effective intervention. This means Colesevelam will be offered before phlebotomy. If someone cannot take Colesevelam, they will be offered phlebotomy however there will be a delay before phlebotomy becomes available.

While receiving phlebotomy, affected Islanders would have regular phone calls with the nurse and blood tests to track how their PFAS levels change. PFAS tests will be done after 6 months then 12 months of starting the intervention, and then annually thereafter. There will also be a PFAS test 12 months after stopping phlebotomy.

3.10 PFAS testing and when the intervention should stop

3.10.1 PFAS testing

The scientific evidence base for interventions which the Panel reviewed in their report was found to be very small. There have only been four published studies in total in the world that have looked at whether bile acid sequestrants and phlebotomy are effective at reducing PFAS levels. Most of these studies only offered interventions for a limited amount of time, ranging from 1 week to 1 year. There is no evidence internationally that reducing PFAS levels improves health outcomes. Interventions for PFAS have not previously been offered outside of scientific studies. Therefore, it is important that anyone taking bile acid sequestrants or having phlebotomy to reduce PFAS levels are closely monitored by a doctor to make sure the affected Islanders' health is protected. Also, the intervention programme needs to be monitored to ensure that the programme is effective at lowering PFAS in blood, and that the side effects and any adverse effects are documented.

The Panel recommends that:

People taking Colesevelam or having phlebotomy to reduce PFAS, should have periodic repeat PFAS blood tests to check on the effect of the intervention.

The Government accepts this recommendation. Anyone receiving an intervention to reduce PFAS levels should have a blood test at the start to confirm eligibility and set their personal starting point. They will have to have blood tests to check on progress. PFAS tests will be done after 6 months and then 12 months of starting the medication or intervention, and then annually thereafter. There will also be a PFAS test 12 months after stopping taking the medication.

3.10.2 When the intervention should stop

The Panel recommends that:

When an individual's serum PFAS levels reach the median background levels, further Colesevelam prescribing or therapeutic phlebotomy should not be undertaken.

Since there is no baseline from wider testing across the island, other options were considered. The geometric mean of the plume Islanders tested in 2022 was 23.9ng/ml. This would be too high to set as a stop level as it includes highly exposed Islanders and is not a true reflection of the Island as a whole.

The Panel have recently estimated how much PFAS an Islander would take in from food and water today. They predicted blood levels would be about 7ng/ml. The Government of Jersey will use this lower number as the stop level for taking action to reduce PFAS blood levels.

4. Questions and Answers

Topic	Question	Answer
Testing	I now live elsewhere in the Island but used to live in the plume area. Is it possible to be tested?	Yes, if you meet the eligibility criteria then you will be able to be tested.
	I currently live outside of Jersey but lived and drank borehole water in the plume in the past. Can I get tested by Government of Jersey?	Yes, you can be tested by GoJ but will need to travel back to the Island to attend an appointment to discuss testing, and then another for the blood to be taken. Results will be delivered in person during another appointment.
	I currently live outside of Jersey and would like to take the intervention. Is this possible?	No, only residents in Jersey will be eligible to receive the intervention
	I currently live outside of Jersey. Can I have details of how to get tested outside of Jersey to give to my GP?	Testing for PFAS isn't routinely available in any healthcare service that we're aware of, or easily accessible for individuals. It is not reasonable to expect doctors from elsewhere to understand or interpret PFAS blood test results because this is not a part of routine care, and they have not been trained in this area. The only reliable way of ensuring people get the right information is to come through the service in Jersey.

	I lived in the plume area during the time of interest but didn't drink borehole water. Am I eligible?	No, you must have drunk borehole water in the plume area within the time of interest to be eligible for testing. Eligibility criteria are listed above.
	I live outside of the plume area but am still concerned about my PFAS levels. How can I get tested?	Unfortunately, there is no public service available to test those who do not meet the eligibility criteria at present. We are unable to suggest how an Islander can get tested for PFAS privately.
	I am not eligible to be tested – where can I get tested privately?	We are unable to suggest how an Islander can get tested for PFAS privately.
Exposure	Why is drinking borehole water so important?	The main exposure for Jersey residents was the use of firefighting foam containing PFAS at the airport during 1980s and 1990s. The wash off from training went down into groundwater, which residents to the west of the airport were drinking in their private, borehole water supplies. If an Islander was drinking mains water, the exposure was much lower, and therefore blood levels will be much lower.
	Why do I have to fill in a questionnaire?	To give us more details about your likely exposure to PFAS, and to ensure that you are eligible for Government of Jersey testing.
Intervention	Why are you offering colesevelam as a first line intervention and not phlebotomy?	The PFAS Panel have indicated that it is more effective at reducing PFAS blood levels than phlebotomy. It works faster, is less invasive, safer and also cheaper.
	Can I request phlebotomy instead of colesevelam?	No, only colesevelam will be offered unless the clinician says that it is not suitable for you.

5. End notes

Islanders who want to read the full PFAS Scientific Advisory Panel Third Report can do so on the website PFAS in Jersey.

Islanders who have questions about any aspect of PFAS can email the Government of Jersey Water Quality and Safety Team at regulationenquiries@gov.je.

Appendix 1– summary of Report 2 findings

To help understand Report 3, it is useful to recap on what the Panel found in Report 2. The Panel prepared their report in the same way, by hearing from experts from around the world, experts by experience and by reviewing the scientific literature. The findings are mainly based on the findings from places where there has been high PFAS exposure, such as Ronneby in Sweden. The Panel found the exposure in Ronneby is very similar to what exposure in Jersey. In Ronneby, the average blood PFAS level was 250 ng/ml.

These findings are based on the scientific evidence that currently exists. As the scientific understanding changes, the findings may change in future.

Heart Health

PFAS can increase the amount of "bad" cholesterol in the blood, known as LDL. High levels of LDL can lead to heart problems like heart disease or strokes. While the Panel didn't find an increase in these diseases among people exposed to PFAS, they agreed to be careful anyway.

Cancer Risks

There is some evidence that people exposed to PFAS might have a higher chance of getting kidney and testicular cancers. The Panel also looked into bladder cancer, but the evidence was not as strong. For other common cancers like breast or prostate cancer, the studies did not show a significant increase in risk.

Immune System and Vaccines

PFAS might affect how well vaccines work. Vaccines help protect us from diseases by boosting our immune system. Some studies suggest that PFAS could lower the effectiveness of vaccines, especially in children. However, there wasn't an increase in infectious diseases experienced by people with high PFAS exposure. The Panel suggested that everyone should still get vaccinated to stay protected.

Hormones and Metabolism

Some studies suggested that PFAS could lead to problems with hormones and metabolism, such as thyroid issues, being overweight, or having diabetes. But the evidence was mixed, meaning not all studies agreed. So, it's not clear whether PFAS contributes to these problems.

Mental Health

The Panel also found that people worried about PFAS contamination might feel stressed or anxious. It's important to offer mental health support to those feeling this way, as stress can impact overall wellbeing.

Reproductive Health

There were concerns about PFAS affecting reproductive health, like having trouble getting pregnant, lower birth weights in babies, or high blood pressure during pregnancy. However,

the evidence wasn't strong or consistent. For breastfeeding, the Panel said that the benefits of breastfeeding are much greater than the possible risks from PFAS.

Other Health Issues

The Panel looked at other possible health problems, like stomach issues, changes in liver function, bone health (like osteoporosis), and development issues in children. The evidence wasn't strong or clear in these areas either. Internationally, more research is needed in future.

Summary of Health conditions

The Panel produced a table of health conditions and whether they think they may be related to PFAS exposure or not. It is important to say that this assessment only includes health conditions where research has been done. There may be other conditions related to PFAS exposure, but there is not enough research at the moment.

Most likely	Increased cholesterol
	Reduced vaccination efficiency in children
	Reduced duration of breastfeeding in exposed mothers
Probably	Kidney Cancer
	Testicular Cancer
	Liver function
Possibly	Type 2 diabetes
	Osteoporosis linked fractures
	Polycystic Ovarian Syndrome (PCOS)
	Reduced birthweight
	Learning and development issues
	Bladder cancer
	Thyroid Disease
Unlikely	Ulcerative Colitis
	Pregnancy induced hypertension

What do people in Jersey think?

Many people in Jersey are worried because they don't know much about the risks of PFAS. Some doctors and healthcare workers also said they need more up-to-date information to help their patients.

What should be done?

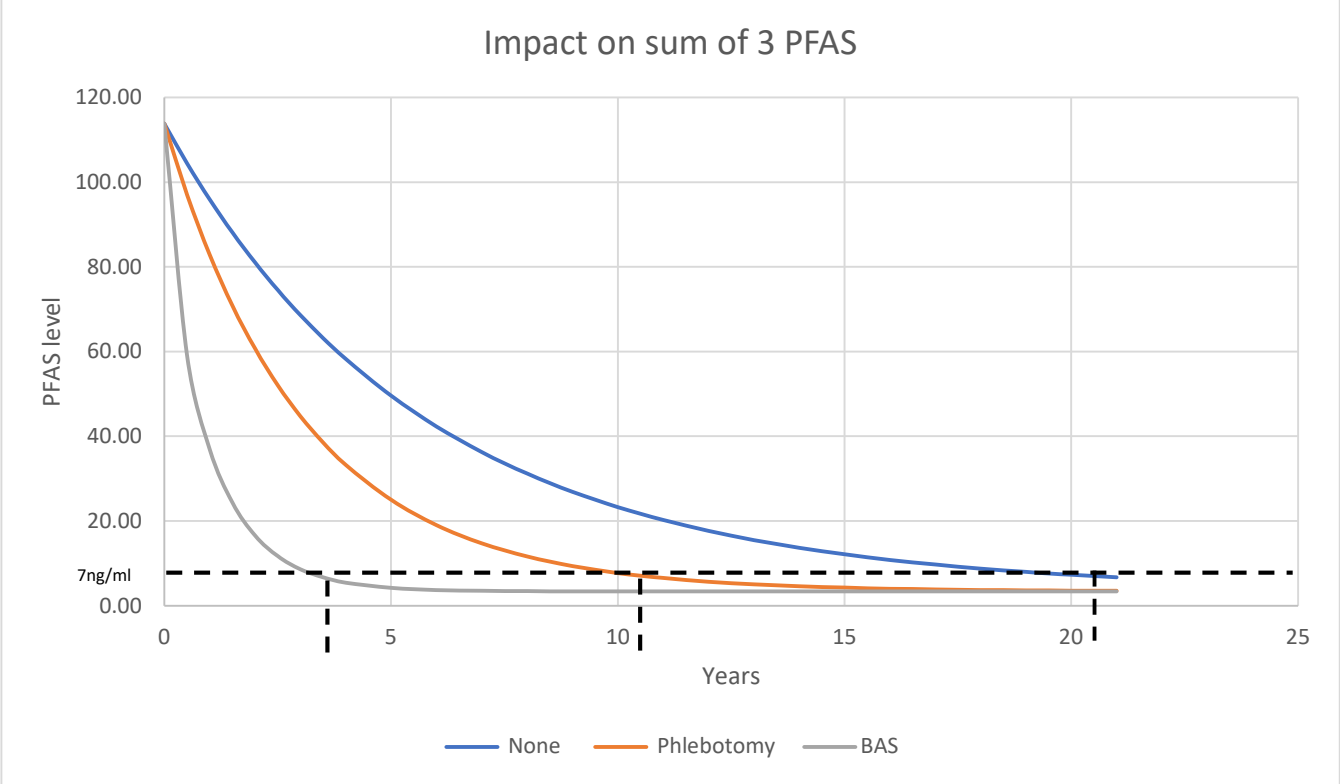
The Panel made several recommendations to help protect people's health and provide better information:

- **Cholesterol Management**: People with high cholesterol should follow normal treatments like a healthy diet or taking tablets as prescribed by their doctor.
- **Cancer Awareness**: Doctors look more closely for the signs of cancers like kidney and testicular cancer in people exposed to high levels of PFAS.
- **Self-Exams**: Regular self-checks for new lumps on the testicles should be encouraged for those exposed to high levels of PFAS.
- **Vaccination**: Everyone should keep up with their vaccinations to stay protected from diseases.
- **Breastfeeding Support**: Mothers should be encouraged to breastfeed, even if they are exposed to PFAS, because the benefits are really large and outweigh the risks of PFAS.
- **Accurate Information**: Doctors and healthcare workers need good information about PFAS to help their patients.
- **Mental Health Support**: People with high levels of PFAS should have access to mental health services.
- **Expert Support**: Jersey should have an expert on PFAS to help local doctors and healthcare workers.
- **Public Information**: Make easy-to-understand resources about PFAS for the public and healthcare workers.

Appendix 2 – Comparison of intervention options

The PFAS Scientific Advisory Panel's third report gives a detailed review of ways to lower PFAS levels in the blood. They recommend one main method, Colesevelam, because it works best. The Government of Jersey agrees with this and plans to offer it to eligible Islanders. How this will happen was explained in section 3 of this report.

The graph below shows how bile acid sequestrants (Colesevelam) and phlebotomy affect the average total PFAS in the blood. In 2022, the tested group had an average (arithmetic mean) PFAS level of 114 ng/ml. The graph shows that bile acid sequestrants lower PFAS from this level to 7 ng/ml in 3.5 years. This is much faster than phlebotomy, which takes 11 years, or doing nothing, which takes 21 years.



It is important to say that these are averages and not guaranteed reductions because everyone is different. Some people's bodies get rid of PFAS faster than others. The different PFAS chemicals also have different half-lives, which means they get excreted by the body at different rates. PFHxS is the slowest, it takes 4.5 years to reduce by half. Therefore, any intervention will reduce PFOS and PFOA faster than PFHxS.

This report, like the earlier health reports, only looks at the plume area. This is the area around the airport where private water supplies were polluted with PFAS due to firefighting foam used at the airport. People in this area were exposed to much higher levels of PFAS in their drinking water than those who now drink mains water. As the body can get rid of PFAS through urine and faeces over time, those drinking mains water in this area now have lower exposure and PFAS blood levels. But these people had much higher PFAS levels in their

blood in the past. It is estimated that the average person in the plume area could have had a blood PFAS level of about 250 ng/ml. The Panel's second report found that this level of exposure was linked to health problems in Sweden.

Around the world, PFAS blood levels were also higher in the past. For example, in the U.S., the average (geometric mean) PFOS level in blood was about 30 ng/ml in 2000. By 2018, it dropped to about 4 ng/ml, an 85% reduction. This drop happened because PFOS and PFOA were banned from products in around 2000. But because these chemicals are still in the environment, people are still exposed to them. Experts don't consider levels of PFAS around 20ng/ml in blood to be "high".

Public Health Jersey

Appendix 3 – Arcadis report “plume” area

Appendix 4 – Report 4 of the PFAS Scientific Advisory Panel

Report Four of the PFAS Scientific Panel is a key part of Jersey's long-term plan to deal with PFAS contamination. The first focus will be on water treatment and rules for keeping drinking water safe. This part of the report will look into the best ways to treat water and review global safety standards. The goal is to make independent recommendations on how to treat PFAS and set safety limits for household water supplies.

The Panel will also give interim advice on drinking water safety. This will be based on the Arcadis Hydrogeological Survey and other scientific research. This advice will help decide if stricter rules or new water treatments are needed to protect public health and ensure safe drinking water.

Report Four will be released in two main phases. Each phase will include a public consultation. The first draft, focused on water treatment and regulation, was delivered in August 2025. The public is currently being asked for feedback as usual. The second phase will look at PFAS in waste, soil, and food. A draft of this phase is planned for December 2025, followed by more public consultation. This step-by-step approach helps the Panel deal with the most urgent issue—drinking water—while still covering broader environmental and health issues later in the year.

The second phase is important because PFAS can also be found in waste, soil, and food. These are major ways people can be exposed. Understanding these risks will help choose the right clean-up methods. The Panel will look closely at local and international research, including PFAS build-up in sea life and how it affects farming. This will guide decisions about food safety, recycling biosolids, and waste management in Jersey.

Report Four aims to support a PFAS clean-up plan that is based on strong science, open to the public, and focused on real concerns. The Panel holds public meetings and listens to experts, residents, and global researchers to shape its advice. The results of Report Four will help the Government of Jersey decide how to clean up PFAS and set future rules—especially for drinking water. Its findings will play a major role in creating a long-term, safe plan for managing PFAS in Jersey.