

**Minutes of public meeting of the PFAS Scientific Advisory Panel on Teams  
16:00 on 7 December 2023**

Panel Members present: Dr Steve Hajioff – Independent Chair  
Dr Tony Fletcher – PFAS and Health member  
Professor Ian Cousins – PFAS and Environment member

Joined by Islanders: Joan Renouf and Lorna King

In attendance: Grace Norman – Deputy Director of Public Health  
Sarah Tyler – Senior Policy Officer

**Welcome:**

The Chair welcomed everyone to the Panel meeting, and reminded people the meeting was being recorded.

**Introductions:**

The Chair and Panel members introduced themselves.

Dr Steve Hajioff, Independent Panel Chair: A background as a GP and a retired Director of Public Health from an area of London with two major international airports and a variety of other environmental challenges; and getting science into policy.

Dr Tony Fletcher, PFAS and Health Panel Member: Epidemiologist at the London School of Hygiene and Tropical Medicine, working on PFAS since 2006 and member of the panel with experience of studies on the health effects of PFAS in West Virginia in the United States, in the Veneto region, in Italy, and in Ronneby,

Professor Ian Cousins, PFAS and Environment Panel Member: A Professor at Stockholm University, an expert on PFAS, appointed as the environmental expert on this Panel and whose expertise on PFAS is on the sources, transport, fate, and exposure of PFAS.

Grace Norman, Deputy Director of Public Health for the Government of Jersey, the commissioner of this work, and a standing observer at these meetings.

Support staff for programme management and administration were also in attendance.

**Declarations of Interest**

No additional declarations.

**Minutes of last meeting**

The minutes of the last meeting are not yet available as the last meeting included hearing from experts by experience (EBE). The minutes from these meetings take longer and EBE will see first what goes on public record. There may be a delay in the minutes of this meeting due to the same reason.

**Additional findings since the last meeting**

There are two issues to note:

Firstly, there was a meeting with Ministers about the response to report 1, the potential for an interim therapeutic phlebotomy service. The public event with the Chief Minister, Environment Minister and Minister for Health and Social Services with Islanders was held on 1 December. The Chair commented that this was a useful meeting, and some interesting

questions were raised by the public. The Chair was pleased to say that government has taken on the Panel recommendations in full.

Secondly, the International Agency for Research on Cancer (IARC) have recently published a Monograph: Carcinogenicity of perfluorooctanoic acid and perfluorooctanesulfonic acid. This research can be found at [Volume 135: Perfluorooctanoic acid and perfluorooctanesulfonic acid – IARC Monographs on the Identification of Carcinogenic Hazards to Humans \(who.int\)](#)

Tony Fletcher presented a summary of the research.

There were four working groups:

1. Exposure of people to PFOA and PFOS
2. Evidence of cancer in humans
3. Evidence of cancer in experimental animals
4. Mechanisms of action or key characteristics of carcinogenic activity

They were only investigating PFOS and PFOA.

Based on the criteria for classification at IARC they concluded the following:

PFOA epidemiology evidence is limited for humans.

PFOS epidemiology evidence is inadequate for humans.

Overall conclusions were:

PFOA carcinogenic to humans (categorised as Group 1 carcinogenic) based on:

- sufficient evidence for cancer in experimental animals
- strong mechanistic evidence that PFOA exhibits key characteristics of carcinogens in exposed humans
- There was limited evidence in humans for cancer of the testis and for renal cell carcinoma

PFOS possibly carcinogenic to humans (categorised as Group 2B possibly carcinogenic) based on:

- limited evidence for cancer in experimental animals
- strong mechanistic evidence
- There was inadequate evidence for cancer in humans for PFOS

Following the presentation, Ian Cousins commented that it is difficult to look at one PFAS at a time when they are interrelated. Tony Fletcher commented that animal experiments are carried out with single substances. The chemical classifications are always one substance at a time.

Steve Hajioff commented that this report is relevant for the report 2, an assessment of the impact of PFAS exposure on health, currently being developed by the Panel.

### **Introducing the experts by experience (EBE) and the purpose of the meeting**

Steve Hajioff explained that it is important to hear from EBE and to help explore issues raised against the scientific literature. In the report, the Panel can also reflect on what this looks like in the real world and reflect on the case studies they have heard.

The Panel thanked EBE today and those from the last meeting for engaging with the process.

A reminder was given that the Panel cannot give individual health advice. The Panel may not be able to reach conclusions around whether individual conditions were caused by PFAS exposure. The Panel will hear from two experts by experience (EBE), then will ask questions for clarification.

Usually, the recordings for these meetings are made available, however where the Panel are speaking to EBE the recording will not be made available to a wider audience. This is to respect people's privacy. The notes of the meeting will be shared with the EBE and published when agreed. After report 2 is complete, transcripts and recordings will be destroyed.

### **Experts by experience personal stories**

Joan Renouf and Lorna King gave testimonies which described the places they had lived, on island and off island, the years they drank water from a private supply, and their respective medical histories.

The Panel then asked some clarification questions regarding their testimonies.

The Panel agreed to ensure that a range of health conditions will be investigated as part of Report 2, informed by Islander testimonies.

### **Wider discussion**

Joan said that because her PFAS water levels were low, she was told she could still drink the water. Joan is still using bore water for washing, showering etc and is concerned about this. PFAS water levels are below WHO (World Health Organization) levels, but she is still concerned.

Steve Hajioff explained that the Panel is looking at different ways that PFAS gets into and out of the body and the impacts of this. The Panel have not formally investigated showering and bathing and its impact.

Ian Cousins said that dermal intake (ie. through the skin) is considered to be low risk for PFAS and so washing should not be a source of exposure). The exposure intake routes for the general global population are generally food, particularly fish, meat, eggs. In general, for someone living in a contaminated area, the primary intake is likely to be drinking contaminated water (*where there is significant contamination of the water system that is being consumed*). There is further evidence on exposure pathways of PFAS.

Steve Hajioff asked about home-grown food and keeping animals for food. Ian Cousins said this has been a concern in other countries using contaminated water for irrigating crops and feeding animals or home produce. In some areas around the world people had been advised not to use home grown produce. If you have been using bore water for irrigating produce, there may be additional exposure. There may be some additional exposure from consumption of produce.

*Post meeting note: A point of clarification was raised at the 8 February meeting where these notes were agreed. To clarify that in areas where there is not a direct source of PFAS contamination, then foods like meat fish and eggs are important for PFAS levels, but where there is a source of contamination from water, then this is the primary factor for exposure.*

*There are variances between types of PFAS. For example, PFOS in the general population (not specific exposed populations) then PFOS in fish is an important factor.*

Steve Hajioff asked whether the mains water is metered or a fixed cost in Jersey, as if it is metered then that may have an impact on people's use of bore hole water. Grace Norman commented that water is both metered and not metered across Jersey.

Ian Cousins asked is gastroenteritis a general diagnosis. Steve Hajioff commented that this is usually caused by a virus or bacteria. However, the symptoms can look like other conditions. It is possible that chemical exposure could cause symptoms like gastroenteritis and a GP may just put it down for food poisoning and not do wider testing. Steve Hajioff will check if there are similar cases like this and feedback in the future if there is any evidence found.

Grace Norman asked if the experts by experience (EBE) had any issues regarding engaging with their GPs at the time of obtaining their PFAS blood results and what was their experience at the time. Grace Norman also checked if the EBE had received the leaflet which helped people understand their PFAS blood results at the time. She commented that this has been updated and is now available online, for future reference. Steve Hajioff mentioned that one of the recommendations from the Panel will be to develop information for clinical staff. It is not unusual for GPs not to know about PFAS. Report 2 will help to increase the understanding of PFAS.

The Chair thanked Joan and Lorna for their testimonies, commenting that these are valuable for the Panel and also that a number of areas have been highlighted for report 2 and report 4 (on the environment) which will be considered.

Joan and Lorna thanked the Panel and staff.

**Any other questions**

None.

**Any other business**

None.

**Date of next meeting**

The 18 January meeting is currently advertised as 10am to 1pm (held online) however the timing may change due to subject matter experts being in different time zones across the world. This meeting is likely to be held in the afternoon and the time is to be confirmed shortly.

*Post meeting note: the meeting time is 3pm to 5:30pm.*

The Chair thanked Lorna and Joan for sharing their experiences and helping the Panel with the process of this report. Thanks, were also extended to the Panel and supporting staff for their valued work.

Steve Hajioff wished everyone a Merry Christmas and a Happy New Year.

There being no further business, the meeting was closed.

*To note that the Panel can be emailed via [PFASpanel@gov.je](mailto:PFASpanel@gov.je).*

*Details of meeting dates and times can be found at [PFAS in Jersey \(gov.je\)](https://www.gov.je/PFAS)*