

Merrimack Village District (MVD) Perfluorochemical (PFC) Community Exposure Assessment

Objective: To assess perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) exposure to residents served by the Merrimack Village District (MVD) public water system.

Rationale: The MVD public water system is supplied by multiple individual wells which are combined prior to delivery of residential drinking water. There is known PFC contamination in some groundwater wells that feed the MVD system and in neighboring private wells. At this time, MVD water supply wells are monitored for PFOA/PFOS and concentrations are less than the Environmental Protection Agency Health Advisory Level.

Due to community concern, the New Hampshire Department of Health and Human Services (DHHS), at the request of town administrators and in coordination with the Governor's office, is conducting a limited community exposure assessment by testing blood (serum) of randomly selected households in the MVD public water system. This will provide residents with information about approximate levels of PFOA and PFOS exposure in the community which may be associated with drinking water exposure.

Methodology: Two hundred individuals who are on the MVD drinking water system will be enrolled from randomly selected households on the MVD public water system. The number of participants selected is sufficiently large to be representative of the entire system and to allow comparison to other tested populations.

Eligible residents will be invited to participate according to the following study design:

- One hundred residential addresses will be selected at random and all occupants of the residence will be invited to participate in the exposure assessment by letter. Random residences will be selected using Geographic Information System (GIS) software. All residents of the selected address are eligible to participate in the program, regardless of age.
 - Invitees will have 30 days to register via the online system or by calling the Public Inquiry Line at 271-9461 to indicate interest.

- Letter of invitation will clearly state that:
 - the intended purpose of the program is a community exposure assessment designed to test a representative number of people whose results will be indicative of the community exposure;
 - recipients will have 30 days to register via the online system after which their invitation to participate will expire;
 - only the first 200 individuals to respond will be included in the program; and
 - the limited community exposure assessment offered to individuals on the MVD public water system is intended to be different from the current Southern NH Perfluorochemical (PFC) Blood Testing Program offered to those with private drinking water wells living in areas where private wells tested above 70 parts-per-trillion (ppt) combined PFOA/PFOS concentration.
 - DHHS staff will remind non-respondent invitees of the program with a follow-up postcard after 14 days.
 - DHHS staff will evaluate the number of respondents after three weeks, and determine whether a second round of invitation letters is required.
- A second round of random residences will be selected and 25, 50, 75, or 100 additional residences will be contacted if needed, until 200 individuals are enrolled in the community exposure assessment.
 - Participants in the MVD PFC Community Exposure Assessment will be required to register, complete an exposure assessment questionnaire which will capture information about potential exposure through MVD water, and sign a consent form to participate. This process will be similar to current procedures for the Southern NH Perfluorochemical (PFC) Blood Testing Program.
 - Once 200 participants are registered, have completed the questionnaire, and signed the consent form, they will be sent a laboratory requisition form specific to the MVD Community Exposure Assessment, along with instructions to have the specimen drawn at contracted phlebotomy locations by the deadline, 30 days hence. Everyone will have the same deadline.
 - Laboratory testing procedures will follow a similar process to the current southern NH Perfluorochemical (PFC) Blood Testing Program, using the same blood draw locations and testing laboratory.
 - Participants will receive their individual test results at the conclusion of the program.

- A summary of the community's results will be shared with participants and with the public. These results can be compared to other tested populations, including the general U.S. population tested through the CDC's National Health and Examination Nutrition Survey (NHANES), and to other communities tested in NH. Results may also be compared to other communities of concern around the country.
- Serum PFAS concentrations will be assessed across several variables:
 - Age
 - Gender
 - Residential history
 - Water consumption
 - Distance from the St. Gobain plant
 - Distance from MVD wells 4&5
 - Occupational history
 - Presence of a water filtration device within the home

Action Items

- ✓ Finalize research plan
- ✓ Complete revised survey
- ✓ Complete invitation letter
- ✓ Establish tentative timeline
- ✓ Develop FAQs
- ✓ Complete random selection of initial 100 households
- ✓ Present to IMT/Town Officials/DES