



**Presentation at Rutgers Community Forum
Update on the Paulsboro PFAS Health Study and
National Academy of Sciences Report Recommending Blood Testing
for PFAS Exposed Individuals
Tracy Carluccio
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Here in New Jersey, we have higher concentrations than most other states of PFAS compounds in our water and other environmental media and we have more people exposed to PFAS because we are the most densely populated state in the nation.

These facts challenge the state to address all the sources of PFAS contamination and the public health issues that have resulted from a legacy and a continuation of PFAS pollution. New Jersey has taken many important steps that other states have not and more than the federal government, even though the USEPA recently revised its health advisory levels for PFOA and PFOS, two of the thousands of PFAS compounds. New Jersey established maximum contaminant levels (MCLs) – mandatory safe drinking water standards that require removal of the chemical from drinking water - for 3 of the most commonly found PFAS in the state – PFNA, PFOA and PFOS.

EPA also is proposing to designate PFOA and PFOS as hazardous substances under the Superfund law, an important federal action. NJ has taken several regulatory actions such as listing PFAS as a hazardous substance under certain state regulations, adopting groundwater standards, applying MCLs to private well water as well as public water systems, and issuing fish consumption advisories statewide for PFAS. And NJ scientists continue groundbreaking research and investigations.

Yet the PFAS problem is so enormous that more needs to be done here in NJ and nationwide. The fact is some New Jerseyans are still, today, drinking water contaminated with PFAS and they may not even know it. Like peeling a never-ending onion, PFAS issues emerge in unexpected ways and places, the pathways of release and exposure are not fully monitored, assessed or understood, issues are delaying some towns' implementation of effective drinking water treatment, destruction of PFAS waste is not settled, some pollution sources continue to release PFAS, so-called replacement chemicals are presenting new threats due to their toxic properties and lack of adequate controls, and people still don't know what to do or how to protect themselves if they have been exposed.

I would like to focus on this last issue, the issue of people who have been exposed to PFAS, which is the main topic of our forum here this evening. I had the privilege of serving as a community liaison to the National Academies study, helping to shape its direction and recommendations with my fellow liaisons, including my fellow presenter here tonight, Hope Grosse from Pennsylvania.

As you have heard, the Report confirms the link between PFAS exposure and several diseases and adverse health conditions, including cancers, decreased antibody response (such as response to vaccinations), abnormally high cholesterol, and decreased infant and fetal growth. These findings are very important for New Jersey, where so many people are exposed, where especially vulnerable and environmental justice populations are in harm's way, and where contamination has come from many sources throughout the state. And the 3 most prevalent PFAS compounds here – PFOA, PFOS and PFNA – are included in the National Academies report, along with 4 others.

The recommendations in the report are made to the Centers for Disease Control clinical guidance and public health departments for those who have been exposed. Importantly, the report says blood testing is the first step in assessing health effects of those with elevated exposure and very specific guidance is offered if testing reveals high PFAS levels. A clinician can use the guidance offered in this report to provide the much needed and currently practically nonexistent medical screening needed for exposed patients.

The recommendations call for medical monitoring of these patients, something that many people have clamored for or have had to file a lawsuit or conduct an exhausting campaign to get. This is relevant for New Jersey because there are many who may have worked in or lived in communities with known or suspected contamination. There are many facilities in NJ that use or have used fluorochemicals such as airports, military bases, wastewater treatment plants, farms where sewage sludge may have been used, or landfills or incinerators that have received waste containing PFAS and, of course, manufacturing plants that use or have used PFAS compounds.

The NJ Attorney General has filed lawsuits against the major corporations who have released PFAS into our environment in an effort to gain corporate accountability for this pollution. One manufacturing facility sued by the state that stands out as a source of PFAS contamination here is Solvay in West Deptford, NJ. A water crisis was triggered in 2013 when an expose of the presence of PFNA in municipal water led to 5 municipalities having to shut down wells, bottled water being handed out by Solvay, emergency treatment systems being installed, and several lawsuits.

This was a traumatic experience for people in the Solvay area, which includes Paulsboro, which had the highest concentration of PFNA in NJ in the groundwater that feeds their municipal well, and according to NJDEP the highest level at the time, in the entire world. PFNA and other PFAS have been and continue to be released into our environment from Solvay, even though they have now replaced their perfluorinated chemicals with others. In fact, Solvay replaced the original PFNA with a replacement chemical that turned out to be more toxic than PFNA itself and which

researchers have found traveled by air throughout not only the DR region where the plant is located but out to the far northeastern corner of the state.

A report was just released last week by Belgian researchers who visited the U.S. this spring. The startling findings are available in a report they have issued about Solvay's pollution in Italy and here in the U.S. The University of Liege laboratories analyzed discharge water samples from Solvay's Spinetta, Italy plant and found people living near the plant are 5 times more exposed to PFOA than the people living further away and people in the most contaminated areas are up to 10 times more exposed. 55% of the Spinetta samples exceed the health value [HBM-II] (10ug/l) for PFOA set by the German Biomonitoring Commission.

The scientists also analyzed the blood samples of Spinetta residents to see if the PFNA replacement used by Solvay here in West Deptford (CI-PFPECA) was present. They found it in 100% of the blood samples from Spinetta residents. They qualify their findings because they didn't have the analytical standard and had to develop one from other research that has been done on water, so they were unable to quantify precisely, only to identify whether or not it was present. And it was. Additionally, in a municipality along the Delaware River, PFAS was found at levels that exceed NJ's MCL in tap water that the investigators sampled when they were here. These findings raise the question – is Solvay's highly toxic replacement compound in the blood of people who have been exposed to air and water from the plant here. And if so what is it doing to their health? This question is urgently in need of an answer.

For New Jersey, even the fastest pace has not been able to fully protect us. Resistance by those companies that are responsible for the pollution and the difficulties I mentioned earlier confound our PFAS problem. The extremely important blood study in Paulsboro and the National Academies clinical guidance and confirmation of the need for blood studies and medical monitoring, is crucial action that addresses the health effects of the exposure of New Jerseyans to these highly toxic "forever chemicals". Further action by government, identifying all pollution sources and making polluters clean up and provide affected communities with safe water at the polluter's expense, expanding blood testing and medical monitoring to other impacted locations in NJ, ongoing litigation, and a ban on the use of PFAS compounds are still critically needed now.