

Good morning,

My name is Jenna Brown. I am here not only representing the PFFV Local 2750 but also for my fellow brothers and sisters. A little background about myself I am a 29-year-old female career firefighter working in Springfield Vermont as a Firefighter/AEMT. I have been on the job full time since 2022. Previously I was a volunteer for Walpole, NH Fire and EMS since 2019. This is where I started my journey in the fire service, at the age of 24.

We all have our own reasons why we do this job. Mine is because it takes special people to respond to the wide range of hazards and scenarios we do on a daily basis, which require us to be problem solvers. Not everyone can do what we do, and we embrace it and face everything with pride and bravery. Viewed by some, especially our children as real life superheroes.

We are all aware that when we decide to put on our gear, whether as a career or as a volunteer, it has the possibility to affect us physically, mentally or emotionally but we do it anyway. It is also imperative to remember that we are not on this journey alone, and everything we come in contact with at work has the possibility to be inadvertently shared with our families who are always there playing a key factor in our success. They are the driving force in the background. I know this firsthand having two stepdaughters at home.

One major health factor we face as a firefighter is no secret. When we do this job, we know that we increase our chances of cancer. What is incredible is knowing this we still do our job anyway. The fire service is now doing studies to help us battle this. Studies show that our own personal gear has a cancer-causing agent called PFAS. PFAS are a man-made chemical that make our gear water resistant and help with the moisture barrier but the long-term effect to our bodies just is not worth it. States around us are acting so now we are asking our state to do the same. Yes, there are plenty of other ways cancer is going to catch up to us but why not start at the gear that is supposed to protect us. When we put this gear on it is the intent to protect us in a hazardous situation but now studies are showing it is indeed causing us more harm than good.

Cancer does not discriminate on gender as we all know. Although there is gender specific reproductive cancer that is now roaring their head. For women you have breast, uterine, cervical and ovarian. Women have an 46 % higher risk of breast cancer and are 500% more likely to be diagnosed with cervical cancer. Men face the risk of prostate and testicular cancer. Men have a 30 % increased risk of prostate cancer and a 34 % increased risk of testicular cancers.

Both genders face issues of infertility as well. A study has been done by the University of California that women who took longer to conceive a child had high levels of PFA's in their

blood stream. When they studied live animals there was evidence of increased pregnancy loss, disruption of sexual hormones and puberty effects. There is literature out there from Xenobiotics that PFA's are directly affecting the sperm morphology of men which greatly effects reproduction. The hormones these chemicals target are estrogen, progesterone and testosterone. These chemicals can be passed through seminal fluid, reproductive organs and fetal dependent structures. The body excretes these chemicals through your urine but if your female it also can be excreted through menstrual cycles and breast milk.

Coming from a woman it is very scary knowing my gear can be a component to me acquiring cancer, infertility or risks during pregnancy. Being a mother, I want to be around for my children that I have at home for a long time. I want to have a child of my own but knowing this is being jeopardized is heart breaking. When I decide to become pregnant, I face the increased potential of infertility and miscarriage. The hormone that is a clinical marker for ovarian reserve is roughly 33% lower among female firefighters. There is data out there showing that female firefighters have a 27 % chance of miscarriage than the national average which is 13.5%. If I were to become pregnant on the job it is hard enough as it is now you're asking me to put gear on that could not only affect me but my unborn child. My unborn child is at risk for a low birth weight ranging at 11.6-16.6 percent chance, anatomical birth defects, fetal brain development, preterm birth, and complications with labor and delivery. Once my baby is born and if I wanted to breast feed my child this unfortunately would not be an option for me. I would be poisoning an innocent life that relies on me to keep them safe and cared for. Now that females are in these field studies are being done and research is coming to light.

Like I said before, our families are a huge component of our success. Why would we want to burden them with us acquiring cancer or the harsh reality of not having the gift to bear children. If we have that chance they are still at risk. This is all new territory, but we cannot just turn a blind eye. Getting rid of our gear with these chemicals is something we can do now.

We all know gear is expensive but with the writing on the wall of the risks at hand it is truly worth it. We aren't asking for this to happen overnight. We are asking for this to be the new standard for our future.

Thank you

Sources:

[FFCAM_Factsheet-MaleRepCancers.pdf](#)

[FFCAM_Factsheet-FemaleRepCancers.pdf](#)

[Research review: Women in the fire service](#)

[Pregnancy and firefighting: Is firefighting bad for your baby?](#)

[Occupational factors and miscarriages in the US fire service: a cross-sectional analysis of women firefighters - PubMed](#)

[Excretion of polybrominated diphenyl ethers and AhR activation in breastmilk among firefighters - PubMed](#)

[Maternal and Child Health Among Female Firefighters in the U.S - PubMed](#)

[Anti-Müllerian Hormone Levels among Female Firefighters - PubMed](#)

[REPRODUCTIVE TOXICOLOGY: Study Associates PFOS and PFOA with Impaired Fertility - PMC](#)

[How Per- and Poly-Fluoroalkyl Substances Affect Gamete Viability and Fertilization Capability: Insights from the Literature - PMC](#)