

The Bangor Fire Department is seeking funds to purchase a Turnout Gear Washer/Extractor and Dryer. We are requesting \$23,209.90 to purchase and install this washer and dryer to increase our efficiency and to provide a safer working environment for our firefighters and citizens. Due to severe budget restraints, without outside funding for this project, we are unable to purchase this important piece of safety equipment for our firefighters and EMS personnel as they provide services to the citizens of Bangor and surrounding communities. On average we respond to over 9,000 calls for service. These calls include many hazardous situations including fires, fuel spills, motor vehicle accidents, hazardous materials response, emergency medical calls, and many more. This grant money will help ensure we have gear that is clean, safe to wear, and ready to respond at any moment increasing the safety of our firefighters and our citizens. Having dirty or contaminated gear causes many safety issues. While on the job, we come in contact with carcinogenic materials, toxins and communicable disease found in blood or other body fluids. These hazards can then be carried away to potentially cause harm later by ingestion, inhalation or absorption from touch. The firefighter, or anyone else who has contact with the turnout gear, is then at risk. This is a huge safety concern not only for us, but for the citizens we protect.

As a group, firefighters have rates of cancer that are twice as high as most people in the United States. In a white paper issued last year, the Firefighter Cancer Support Network listed several cancers with higher rates among firefighters:

- Testicular cancer (2.02 times greater risk)
- Multiple myeloma (1.53 times greater risk)
- Non-Hodgkin's lymphoma (1.51 times greater risk)
- Skin cancer (1.39 times greater risk)
- Prostate cancer (1.28 times greater risk)
- Malignant melanoma (1.31 times greater risk)
- Brain cancer (1.31 times greater risk)
- Colon cancer (1.21 times greater risk)
- Leukemia (1.14 times greater risk)

- See more at: <http://dianeatwood.com/catchinghealth/cancer-risks-for-firefighters-more-than-you-may-realize/#sthash.6HKZAQNX.dpuf>

In a three-year study completed in 2005 by the University of Cincinnati, researchers concluded that firefighters face a:

- 102% greater chance of contracting testicular cancer than any other type of worker;
- 53% greater chance of multiple myeloma;
- 51% greater chance of non-Hodgkin lymphoma;

- 39% greater chance of skin cancer;
- 32% greater chance of brain cancer;
- 28% greater chance of prostate cancer;
- 22% greater chance of stomach cancer; and
- a 21% greater chance of colon cancer.

In addition to the cancer risk, dirty gear also poses other safety risks. Dirty gear limits its ability to protect the wearer. Soot and other products of combustion leave various material deposits on and in the fibers of the protective gear and causes the surface of the protective gear to be less heat reflective. Not only is the turnout gear likely to catch fire itself, but dirty gear is also harder to be seen by others on the scene. Perhaps less obvious, carbon based soot increases conductivity raising the potential for electrical shock when coming in contact with live wires such as in structures or vehicles.

Over the long term, turnout gear that is always dirty doesn't last as long. This has to do with the fibers that make up the shell of the turnout gear and how soot and other particles settle on and in those fibers. These particles and burned bits can be abrasive. With the regular movement and bending of the gear material, the foreign matter can cut and wear the fibers. Cleaning the gear shell every six months or when obviously soiled reduces the amount of abrasive particles.

The National Fire Protection Agency or NFPA recommends washing soiled turnout gear immediately after exposure to fire or body fluids. The NFPA also warns against cleaning gear in homes or public laundries to avoid cross-contamination. Currently, we only have one set of gear issued to us. If our gear becomes contaminated, we have to wash it one set at a time in a commercial washing machine. This washing machine may get the heavy soils off the outside of our gear, but it does not get all the contaminates out of it. Also, because you can only wash one set at a time, it takes several days to wash the many sets of gear that were exposed at a scene causing the other dirty sets to continually expose our firefighters and citizens to potentially dangerous contaminates.

This equipment will increase the safety and efficiency of our firefighters and our citizens. It will allow us to properly clean our gear preventing unnecessary exposure to toxic chemicals and body fluids and reduce the time gear/personnel will be out of service and It will allow our gear to last longer limiting our operational costs.

We thank you for your time and attention to this matter and look forward to hearing from you soon.