Firefighters do a job no one else wants to do. Firefighters enter atmospheres that are poisonous and toxic to protect and save lives. This legislation isn't about dollars and cents it is about doing what is right for those that protect the public.

Science:

The most recent scientific study published in 2013 by the National Institute of Occupational Safety and Health of 30,000 firefighters in San Francisco, Chicago, and Philadelphia has definitively identified cancer as an occupational illness as a result of firefighting.

The International Agency for Research on Cancer has identified the chemicals found in the smoke of a typical structural fire:

Arsenic, Asbestos, Benzene, 1,3 Butadiene, Dioxins, Formaldehyde, Hydrochloric Acid, Hydrogen Cyanide, and more.

Many of these chemicals contained in smoke have been definitively proven to be carcinogenic to humans by the International Agency for Research on Cancer (IARC) and the National Institute of Occupational Safety and Health (NIOSH)

 Incidence of cancers in firefighters: Testicular (2.02 greater), Skin cancer (1.39 greater), Prostate (1.28 greater), Brain (1.31 greater), colon (1.21 greater), Breast cancer being studied now in the San Francisco Fire Department, preliminary results have found breast cancer incidence 6 times the general population (NIOSH).

Absorption route of exposure: for every 5° increase in skin temperature, absorption rate increases by 400%. Neck, jaw, wrists, and groin most common areas.

Chicago Fire Department: 2015 study found Benzene off gassing from firefighter turnout gear 5 times acceptable levels hours after exiting fire and 2 times acceptable levels from their breath after immediately exiting fire.

Current law places burden on firefighters to battle cancer and prove it was an occupational illness. This is WRONG.

Workers' compensation issues:

While a Statewide workers' compensation policy is a good idea, it is not realistic with today's budget and would be cost prohibitive.

> Career firefighter volunteering: **Primary** employer is responsible for workers' compensation.

- Since incidence of cancer is tied to multiple exposures over an extended period of time (10-15 years), smaller communities are less likely to experience an increase in claims, due to low incidence of fires.
- Cities and towns are already paying for health insurance and workers' compensation; therefore burden is shifted over to workers' compensation. OR if they are self-insured, cities and towns pay either way.
- The Workers' Compensation Act (also known as Chapter 568 of the Connecticut General Statutes) the main premise of the Act has always been to provide wage replacement and other benefits, as well as medical treatment, for those employees who have been injured, disabled, or killed while performing their jobs (State of Connecticut Workers' Compensation Commission).
- For injuries/illnesses occurring on or after July 1, 1993, weekly TT benefits are equal to 75% of your after-tax earnings (federal and state taxes and FICA) for the 52-week period prior to the injury/illness — this TT benefit may not exceed100% of the State Average Weekly Wage.
- Payment of All Medical Bills [31-279-9(e)]—All medical bills should be paid by the workers' compensation insurance carrier or self-insured employer.
- The purpose of workers' compensation is to protect workers and let them concentrate on healing and returning to work, not losing their insurance, job, home, etc.
- ➢ If the State purchases a Workers' Compensation policy for all municipalities covering cancer, they lose their indemnification, thus allowing employees to sue for damages as a result of contracting cancer while in the employ of the municipality.

Health:

- Early detection and prescreening are the keys to successful cancer treatments. By taking a proactive approach rather than reactive, medical costs will be reduced.
- For example: When colorectal cancer is detected at a localized stage, the 5-year survival is 90%; however, only 40% of colorectal cancers are diagnosed at this early stage, in part due to the underuse of screening. If the cancer has spread regionally, to involve nearby organs or lymph nodes, by the time of diagnosis, the 5-year survival drops to 71%. If the disease has spread to distant organs, the 5-year survival is 13%.
- Physicals will reduce costs by early detection and intervention and ancillary effect of diagnosing pre-diabetes, pre-hypertension, and heart disease.

- Need to work a minimum of 5 years before presumptive benefit eligibility achieved; also, members are covered 5 years post-retirement or volunteering.
- > May be required to submit to annual physical to maintain eligibility.
- Average cost per claim \$62,600, diagnosis, treatment, and return to work as provided to the UPFFA by members EOB for various types of cancers that would be covered under this legislation.
- > Additional annual costs provided to UPFFA by member's EOB: \$450
- > Nicotine detection to prevent smokers from receiving coverage under the bill:

A simple, sensitive, and inexpensive singe-drop microextraction (SDME) followed by gas chromatography and flame-ionization detection (GC-FID) was developed for determination of nicotine, anabasine, and cotinine in human urine and saliva samples (Journal of Chromatography B Volume 878, Issue 28, 15 October 2010, Pages 2857–2862)

If a firefighter is diagnosed with cancer, recovers and is considered "cancer free" and they are diagnosed again how is this classified or claimed?

Only a physician can make that determination. I could not find any terminology defining "cancer free" at the National Institute of Health or the National Cancer Institute. According to the National Cancer, cancer is measured by the "5 year relative survival" rate. This percentage is based upon patients living beyond five years from original diagnosis (National Cancer Institute, 2015). The American Cancer Society states "As a whole, cancer survivors have a small (15%) increased lifetime risk of developing a second primary cancer" (American Cancer Society, 2015).

For our case, if a physician documents a patient as "cancer free" after 5 years or any time frame he/she deems appropriate based upon accepted medical and scientific data, and no evidence of cancer is present, and the member is subsequently diagnosed with cancer, it would be considered and claimed as a new injury.

> Can someone join a fire department and never fight a fire?

That is entirely possible. Many fire departments in the volunteer classification have, but not limited to, social memberships, auxiliary classifications, non-interior firefighting classifications (support functions), or dispatcher. However, the bill as written precludes these

members, although valuable assets to their respective departments, from receiving presumptive cancer coverage by identifying specific exposures as determined by the International Agency of Research on Cancer. Specifically, (*C*) such cancer is one that is known to result from exposure to heat, radiation or a known or suspected carcinogen as determined by the International Agency for Research on Cancer or the National Toxicology Program of the United States Department of Health and Human Services. This paragraph narrows the scope and nature of exposure to actual interior/firefighting activities. Exterior firefighting, i.e. vehicle fires, dumpster fires would also be considered an exposure based upon the chemical composition of vehicles and the unknown contents of a dumpster. Any fire suppression activities or cause and determination investigations (fire marshals) would need to be considered an exposure.