

<p>Health and Injury Risks</p> <p>CANCER</p>	<p>PHOENIX FIRE DEPARTMENT HEALTH & FITNESS</p> <p>M. P. 1-A02.03 01/2012-R Page 1 of 2</p>
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INTRODUCTION

Current research on the relationship between the incidence of cancer and the occupation of fire fighting has produced some startling data.

- The cancer rate for fire fighters rose from 18% in 1950 to 38% in 1980.
- Since 1950, the average age of death from cancer for fire fighters dropped from 49 to 44.
- A comparison of cancer incidence rate between fire fighters and the general population produced the following table:

<u>Type of Cancer</u>	<u>% Incidence Rate Above Normal</u>
Throat	200+
Mouth	200+
Lung	120-190
Brain	129
Prostate	117
Pancreatic	140-176
Rectal	143

*Table result of mortality and incidence studies in L.A., Toronto, Seattle and Boston; National Institute for Occupational Safety and Health; National Cancer Institute; Foundation for Fire Safety; National Bureau of Health Statistics.

It is important to note that the medical community is not in complete agreement regarding the validity of this research and its subsequent data.

FIRE GROUND EXPOSURE

The one area that researchers appear to have agreed upon is the increased risk of exposure to carcinogens by fire fighters in the performance of their duty. Carcinogens are present in almost every object that a firefighter comes into contact with on a daily basis, whether that be hidden asbestos in insulation, wallboard or floor tile or the products that contain plastics. For the most part these items are benign in their natural, usable state, but when introduced to fire and heat they can become the "killing" smoke. This "killing" smoke is known to contain 53 toxic compounds, of which 43 are known or suspected to be carcinogenic.

To complicate matters, not all by-products of plastic smoke are understood or even known. The accumulative effect of multiple exposures to low levels of carcinogens or the simultaneous exposure to multiple carcinogens is also unknown.

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CONTRIBUTING FACTORS

Diet and lifestyle have also been listed as contributing factors and should not be ignored.

PREVENTIVE MEASURES

The good news is there are a number of strategies that reduce the risk of developing cancer. The top twelve are:

- Forget the smoke-eater image. Wear your SCBA!
- Don't use tobacco products
- Go easy on alcohol.
- Respect the sun's rays -- use a Number 15 sunscreen.
- Decrease salt-cured, smoked, and nitrate-cured foods from diet.
- Trim fat from your diet.
- Eat more cabbage-family vegetables.
- Add high-fiber foods.
- Choose foods with vitamin A and C.
- Keep fitness levels up and body fat down.
- Be happy