

LUNG CANCER

Introduction

For my wellness report, I am writing on lung cancer and the impact that it has on society. Many people throughout the world die from lung cancer every year and families are left with the burdens and sadness of their loss. I personally have chosen this topic because of how it has affected my life and me. My grandfather and both of my great-grandmothers died from lung cancer when I was a very young age and it still effects me to this day. We all know that lung cancer is a direct result from smoking cigarettes or cigars for a prolonged period of time. Although cigarettes are not the only cause for lung cancer, this is still the main trait that many people who have lung cancer have in common. I feel that it is so important to educate the public about the dangers of smoking and lung cancer and to show the world that it can be prevented in almost all cases by just not buying cigarettes. This is the main reason why I chose this report is to identify the causes, risk factors, research measures, statistics, and current treatments for lung cancer that are being documented today. I am sure that everyone that reads this has some direct connection to lung cancer, whether it is a family member, friend, acquaintance, or a celebrity that they have seen on TV, it has either directly or indirectly affected you. Only in rare cases have we seen

people who have no history of smoking, like Lance Armstrong, develop lung cancer. So let's dive deeper into this subject as report on lung cancer.

Section 1: Background and Problem Statement

- **Web site #1 Name: National Cancer Institute**
- **Web address: www.cancer.gov**
- **Background Information:**

So what is the problem here? Lung cancer is defined as cancer that forms in tissues of the lung, which usually develops in the cells lining air passages. There are two main types of lung cancer that most people are diagnosed with; those two main types are small cell lung cancer and non-small cell lung cancer. These types are diagnosed based on how the cells look under a microscope. Small cell lung cancer is defined as a small aggressive, fast growing lung cancer that forms in the tissues of the lungs and can spread to other various parts of the body. When looked at under a microscope, the cells look small and oval shaped, thus getting the name small cell lung cancer. The other type of lung cancer, non-small cell lung cancer is defined as a large cluster or group of lung cancers that are named for the kinds of cells found in the cancer and how the cells look directly under a microscope. The three main types or subdivisions of non-small cell lung cancer are squamous cell carcinoma, large cell carcinoma, and adenocarcinoma. Non-small cell lung cancer is the most common kind of lung cancer. This is the

most likely cancer that you will get if you are diagnosed with lung cancer during some point in your life.

- **Web site #2 Name: Healthy People 2010**
- **Web address:**
www.healthypeople.gov/dOCUMENT/html/volume1/03cancer.htm
- **Background Information:**

Healthy People 2010, which is the national public health plan and agenda to address all of the health issues and problems that impact the American people's health and wellness, does not have a particular section on lung cancer but it has a detailed section on cancer in general. So from that detailed section on cancer, I am going to derive their basic background statement and concerns that they have outlined in the section and it apply it to my topic seeing as it is a division of cancer. Cancer is the second leading cause of death in America every year, about half a million people die from cancer. Out of that, about one hundred and sixty four thousand die of lung cancer. When you think about that, it's crazy. That is a lot of deaths in one year for only one type of disease. The ability to reduce cancer death rates depends, in part, on the existence and application of various types of resources. First, the means to provide culturally and linguistically appropriate information on prevention, early detection, and treatment to the public and to health care professionals are essential. Meaning that information must be provided to all races and classes of the American people on cancer prevention. Second, mechanisms or systems must exist for

providing people with access to state-of-the-art preventive services and treatment. Where suitable, participation in clinical trials also should be encouraged. Third, a mechanism for maintaining continued research progress and for fostering new research is essential. Genetic information that can be used to improve disease prevention strategies is emerging for many cancers including lung cancer, and may provide the foundation for improved effectiveness in clinical and preventive medicine services. They estimate that smoking cessation and improved dietary habits can prevent more than fifty percent of all cancer.

- **Web site #3 Name: Medicine Net**
- **Web address: medicineNet.com/lung_cancer/article.htm**
- **Background Information:**

There are quite a few causes of lung cancer but the main one is smoking which accounts for about seventy percent of all cases of lung cancer. Other causes could be from asbestos fibers, family history and genetics, radon gas, air pollution, and previous cases of lung disease can all be cause of lung cancer.

Section 2: Research

- **Web site #1 Name: Pub Med**
- **Web address:**
ncbi.nlm.nih.gov/pubmed/20187007?1tool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=1
- **Summary of the research:**

One piece of research I found was done by a group of scientists in Montreal, Canada and their experiment as to see if nickel, chromium VI, and cadmium, which were known carcinogens found in lung cancer tumors, had any affect on people who were exposed to these metals in their daily lives or occupations. The research showed that odds of lung cancer were only increased from former smokers or non-smokers and had no effect on current smokers.

- **Web site #2 Name: Pub Med**
- **Web address: ncbi.nlm.nih.gov/pmsarticles/PMC2363609/**
- **Summary of the research:**

Another research experiment I found to be quite interesting was done by a group of doctors and scientist from Japan testing the effectiveness of screening for lung cancer using a mobile low dose spiral computed tomography scanner. They found out through the scanning of several thousand people that they detected nearly eleven times the expected annual number of early lung cancers. This shows that technology has a great effect on detecting and finding and also treating lung cancer.

- **Web site #3 Name: Pub Med**
- **Web address: [ncbi.nlm.nih.gov/pbmed/19027483?ordinalpos=1&1tool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_MultitemSupl.Pubmed_TitleSearch&linkpos=2&log\\$=pmtitlesearch4](http://ncbi.nlm.nih.gov/pbmed/19027483?ordinalpos=1&1tool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_MultitemSupl.Pubmed_TitleSearch&linkpos=2&log$=pmtitlesearch4)**
- **Summary of the research:**

A third piece of research that I came across was a research experiment documenting the application of the drug gefitinib and how it was more effective yet less toxic than chemotherapy. They compared gefitinib with docetaxel in patients with locally advanced or metastatic non-small-cell lung cancer who had been pretreated with platinum-based chemotherapy. The results showed that the drug gefitinib was very effective with less toxicity than chemotherapy.

Section 3: Statistics

- **Web site #1 Name: Centers for Disease Control and Prevention**
- **Web address: cdc.gov/cancer/lung/statistics/inex.htm**
- **Summary of the statistics:**

According to the Centers for Disease and Control and Prevention Web site, there were some really good statistics. On their statistics page for lung cancer, they had a few good facts. One of them was that in two thousand a five, which is currently the latest year that they have done statistics for lung cancer, one hundred and seven thousand four hundred and seventeen men and eighty nine thousand two hundred seventy one women were diagnosed with some form of lung cancer. Also, in two thousand and five, Ninety thousand one hundred and thirty nine men and sixty nine thousand and seventy eight women died from lung cancer.

- **Web site #2 Name: American Cancer Society**

- **Web address:**
cancer.org/docroot/CRI/content/CRI_2_4_1x_What_Are_the_key_Statistics_About_Lung_Cancer_15.asp?slterea=
- **Summary of the statistics:**

Roughly twenty nine percent of cancer related deaths in the United States come from lung cancer each year. Roughly 400,000 lung cancer survivors are living in the United States. Sadly, due to the lower survival rate of lung cancer vs. breast and prostate cancers, there are fewer lung cancer survivors than breast and prostate cancer survivors. The average age that lung cancer is diagnosed is at age seventy-one with less than three percent of people diagnosed under the aged of forty-five so you can rule out getting it as a child or a young adult.

- **Web site #3: National Cancer Institute**
- **Web address: seer.cancer.gov/statfacts/html/lungb.html**
- **Summary of the statistics:**

In two thousand and nine, the National Cancer Institute put together a few statistics about the number of diagnoses last year in Connecticut. In the past five years, Connecticut's lung cancer mortality rate rose by zero point eight percent. From two thousand two to two thousand six, the incidence of lung cancer diagnose rose by zero point two percent. Overall, the mortality rates in every county of Connecticut have been quite stable and relatively on track to what the National Cancer Institute predicted.

Section 4: Consumer Information

- **Web site #1 Name: American Cancer Society**
- **Web address:**
cancer.org/docroot/CRI/content/CRI_2_4_1x_What_Are_the_key_Statistics_About_Lung_Cancer_15.asp?slterea=
- **Summary of the information:**

There are a slew of good sites that provide credible, non-biased information on lung cancer. They provide great facts and can really educate people who don't have a firm grasp on the entire topic. Some interesting statistics include the fact that more people die from lung cancer each year than the people who die from colon, breast and prostate cancers combined. The overall ratio that a man could develop cancer in his lifetime is one in thirteen, for a woman, the ratio is one in sixteen. Black men are forty percent more likely to develop lung cancer than white men in their lifetime. About 2 in 3 people who are diagnosed with lung cancer are over the age of sixty-five.

- **Web site #2 Name: National Cancer Institute**
- **Web address:** seer.cancer.gov/statfacts/html/lungb.html
- **Summary of the information:**

Some other interesting consumer info I found was located on the National Cancer Institute Web site. Approximately 0.0% people were diagnosed under age 20; 0.2% between 20 and 34; 1.8% between 35 and 44; 8.8% between 45 and 54; 21.0% between 55 and 64; 31.4% between 65 and 74; 29.1% between 75 and 84 and 7.7% 85+ years of age. The corresponding 5-year relative survival rates were: 52.6% for localized; 23.7% for regional; 3.5% for distant; and 8.5% for un-staged lung cancer.

- **Web site #3 Name: Lung Cancer Org**
- **Web address: lungcancer.org/reading/about/php**
- **Summary of the information:**

Some other interesting consumer info I found was located on the National Cancer Institute Web site. Approximately 0.0% people were diagnosed under age 20; 0.2% between 20 and 34; 1.8% between 35 and 44; 8.8% between 45 and 54; 21.0% between 55 and 64; 31.4% between 65 and 74; 29.1% between 75 and 84 and 7.7% 85+ years of age. The corresponding 5-year relative survival rates were: 52.6% for localized; 23.7% for regional; 3.5% for distant; and 8.5% for un-staged lung cancer.

Section 5: Solutions to the Problem (or Issue)

- **Web site #1 Name: Lung Cancer Foundation of America**
- **Web address: lcfamerica.org**
- **Summary of the information:**

Lung Cancer Foundation of America is a great foundation that is dedicated to the prevention, cure, and education of lung cancer. The Lung Cancer Foundation of America's mission is to save lives by dramatically increasing the five-year survival rates for all stages of lung cancer. They try to supply all of the funding research and scientists need to wipeout this horrible disease and help save lives. You can donate like I did, right from their homepage and watch videos of patients in desperate need of advance medical treatment.

- **Web site #2 Name: The Joan Gaeta Lung Cancer Foundation**
- **Web address: jglcf.org/jglcf.aspx**
- **Summary of the information:**

Another great site that is dedicated to the cause of helping people who deal with lung cancer is The Joan Gaeta Lung Cancer Foundation. They are affiliated with the aforementioned LCFA and their goal is to provide the necessary and critical funding for creative and leading edge lung cancer research programs to help find early detection, treatment, and ultimately a cure for this deadly disease. This is a wonderful site that really dives deeply into the stories of average ordinary everyday people who were dealt this disease and how they overcame it with help of this foundation.

- **Web site #3 Name: Lung Cancer Research Foundation**
- **Web address: lungcancerresearchfoundation.org/**
- **Summary of the information:**

This last foundation site that I found was the Lung Cancer Research Foundation. The LCRF, as it's commonly referred to, is an organization that was founded in two thousand and five by Laurie C. Carson. Since that time her foundation has raised funds and awareness that have been so beneficial to the cause. The goal of the Lung Cancer Research Foundation is to create a unique and focused organization that can help advance and develop new scientific approaches and clinical treatments. Sites like these have really helped me understand what's being done in this area and how much people care.

Conclusions:

In conclusion, I learned the outrageously disparaging facts about lung cancer and how deadly the disease really is. Personally through first hand accounts of what has happened to family members and what I have heard and read about lung cancer, I will never pick up a cigarette for as long as live and I will take into affect all of the other factors that can lead up to this brutal and deadly disease. I can only hope that my audience of readers can somehow interpret these facts that I have presented in a way that opens their eyes to the cause and that they will share this information with others.

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| Back to Betty C. Jung's Web site | http://www.bettycjung.net |
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