

Flight Surgeon Notes #6

Smoking

With the opening of the new year of 2020, there remains little controversy about the health hazards of cigarette smoking. The statistics are overwhelming. Nearly every organ of the Human body is adversely affected by smoking. Tobacco use remains the largest preventable cause of disease and premature death in the United States. It is the cause of 1 out of 5 deaths in the US. Despite these grim statistics, 42 million Americans continue to smoke.

Before I list the hazards related to tobacco, Veterans of 12TFW will appreciate a short story from Vietnam. Any discussion of smoking reminds me of an incident that occurred when I was Flight Surgeon at Cam Ranh Bay in 1966.

A 26 year old pilot visited the flight surgeon's office, complaining of a persistent cough. Because of its duration, I requested a chest x-ray. The results were striking and I reviewed the x-rays with him. I informed him that this was the chest x-ray of an 80 year old man. He admitted to chain-smoking 3-4 packs of cigarettes daily. I then informed him that if he continued to smoke, he would never achieve age 80. In a discussion to rid him of cigarettes, I suggested that he try smoking a pipe. It satisfies a nervous habit, it is too strong to inhale and you spend your time fiddling with it to keep it lit. He thanked me and left the office. 2-3 days later, he was in the back-seat (GIB) position while flying cover for an F-105 bombing mission in the Hanoi-Haiphong area. While in a dog-fight with MIG's, the pilot-in-command noted that the cockpit was suddenly filling with smoke. He detected no evidence of damage to the aircraft and was relieved to learn that the smoke was belching from the Lieutenant's pipe in the back seat. During aerial combat, the GIB had experienced an anxiety reaction and lit his pipe to calm his nerves.

Now, Back to business!

Nicotine, whether absorbed through the mouth or lungs, exerts a harmful effect on blood vessels throughout the body. No less than a campfire, tobacco smoke carries any number of smoke particles throughout the lungs. This causes scarring. Let's list a number of diseases and the influence of smoking:

- **Lung Cancer**-Smoking is the number one cause of Lung Cancer.
- **Heart Disease**-1 out of every 5 heart disease deaths is related to smoking.
- **Diabetes**- Smoking causes type 2 diabetes (Type 2 does not require insulin injections)
- **Liver Cancer**- Smoking increases the risk of liver cancer
- **Erectile dysfunction**- Smoking blocks the blood vessels to create this problem
- **Vision Loss**- Smoking increases your risk of cataracts and glaucoma
- **Ectopic Pregnancy**- 11% of these pregnancies can be related to smoking during pregnancy
- **Tuberculosis**- If you have been treated for T.B., smoking doubles your risk of getting it again
- **Colorectal Cancer**- Smokers are more likely to die of colorectal cancer
- **Rheumatoid Arthritis**- Smoking increases your risk of getting rheumatoid arthritis

- **Secondhand Smoke**- In the U.S., secondhand smoke causes 42,000 deaths from heart disease and 3,400 deaths from lung cancer
- **Costs Of Medical Care**- \$289 billion/yr. in the U.S. was spent on medical care for smokers
- **Stroke**- Smoking doubles the risk for stroke
- **Loss of Life**- The average loss of life for smokers is more than 10 years
- **Cervical Cancer**- The risk of cervical cancer doubles for women who smoke
- **Bladder Cancer**- Smoking is the number 1 risk for bladder cancer
- **Congenital Defects**- Smoking during pregnancy increases the risk for cleft palate
- **Cancer Treatment**- Smoking increases the risk that cancer treatment will fail
- **Immune System**- Smoking depresses the immune system and increases your chances of picking up common illnesses
- **Youthful Appearance**- Smoking ages your skin by increasing wrinkles and making you look older. It also discolors your teeth and fingernails
- **Financial Savings**- Quitting smoking will save you an average of \$1,938.15 per year.
- **Hearing Loss**- Is 70% more likely to occur in smokers
- **Osteoporosis with Fractures**- Is an increased risk with smokers
- **Women who Smoke**-While taking contraceptives are at greater risk for complications
- **Crohn's Disease**- A type of inflammatory bowel disease occurs with greater frequency for smokers
- **Obesity**- Smoking increases the appetite and results in weight gain
- **Baldness**- Smoking causes premature baldness and lowers the age of turning gray
- **Life Insurance**- Insurance rates are 20%-30% lower for nonsmokers
- **Wound Healing**- Is retarded in smokers
- **Menopause**- Women who smoke have more hot flashes during menopause
- **Alzheimer's Disease**- Mental decline in smokers is 5X faster in smokers
- **Emphysema or COPD**- Smoking causes 9 out of 10 deaths in these patients. This is the number 3 killer in the U.S. for smokers.
- **Cancer of Mouth, Throat and Esophagus**-Directly relates to how much a person smokes or chews tobacco
- **Sudden Infant Death Syndrome**-(Occurs between 1 month and 1 year of age) Is more common for women who have smoked during pregnancy

After rendition of the above, I will stick with my comments to the Lieutenant at Cam Ranh! There is an old saying that, *“Life bears the seeds of its own destruction!”*

It is not easy to overcome an addiction to tobacco. Research by the American Cancer Association reveals that successful kicking the habit requires support.

The following list covers different support programs:

- Telephone smoking-cessation hotlines

- Stop-smoking groups
- Counseling
- Nicotine replacement products
- Prescription medicine to lessen cravings
- Guide books
- Encouragement and support from friends and family members
- Take up another habit like chewing gum, that can be easier to quit, instead of grabbing for a cigarette.

Note: *The above summary of health problems with smoking was abstracted from UnityPoint Clinic on line.*

Bottom Line; It is never too late to stop smoking!

Recovery Timeline Benefit for the Quitters

- **1 day** - the risk of heart attack begins to decrease.
- **2 days** - a person may notice a heightened sense of smell and more vivid tastes.
- **3 days** - the nicotine levels in a person's body are depleted. While it is healthier to have no nicotine in the body, this initial depletion can cause nicotine withdrawal. Around 3 days after quitting, most people will experience moodiness and irritability, severe headaches, and cravings as the body readjusts.
- **1 Month** - a person's lung function begins to improve.
- **9 Months** - the lungs have significantly healed themselves. The delicate, hair-like structures inside the lungs known as cilia have recovered from the toll cigarette smoke took on them.
- **One year** - a person's risk for coronary heart disease decreases by half.
- **5 years** - the body has healed itself enough for the arteries and blood vessels to begin to widen
- **10 years** - a person's chances of developing lung cancer and dying from it are roughly cut in half compared with someone who continues to smoke. The likelihood of developing mouth, throat, or pancreatic cancer has significantly reduced.
- **20 years** - the risk of death from smoking-related causes, including both lung disease and cancer, drops to the level of a person who has never smoked in their life. Also, the risk of developing pancreatic cancer has reduced to that of someone who has never smoked.

Note: *The above timeline source; Medically reviewed by Timothy J. Legg, Ph.D., CRNP on November 19, 2018 and written by Jenna Fletcher for Medical News Today.*

Vaping

The following comments concern the children and grandchildren of our Veterans.
What is “Vaping?”

E-cigarettes are frequently referred to as “Vaping.” E-cigarettes heat nicotine (extracted from tobacco), flavorings and other chemicals to create a water vapor that you inhale. Regular tobacco cigarettes contain 7,000 chemicals, many of which are toxic. While we don’t know exactly what chemicals are in e-cigarettes, there is almost no doubt that they expose you to fewer toxic chemicals than traditional cigarettes. However, there has also been an outbreak of lung injuries or deaths associated with vaping. As of November 2019, the Centers for Disease Control and Prevention (CDC) confirmed 47 deaths in patients with e-cigarette, or vaping, product use that is associated with injury to the lungs.

Although they’ve been marketed as an aid to help you quit smoking, e-cigarettes have not received Food and Drug Administration approval as smoking cessation devices. A recent study found that most people who intended to use e-cigarettes to kick the nicotine habit ended up continuing to smoke both traditional cigarettes **and** e-cigarettes.

Among youth, e-cigarettes are more popular than any traditional tobacco product. In 2015, the U.S. surgeon general reported that e-cigarette use among high school students had increased by 900 percent, and 40 percent of young e-cigarette users had never smoked regular tobacco.

Most e-cigarettes contain nicotine. Kids have no knowledge of vaping products. Since vaping has become more socially acceptable, they assume that they are perfectly safe. Medical literature suggests that 2 million young adults use electronic cigarettes as their first nicotine-based product. They’re not trying to quit smoking — they’ve never smoked before! I have a 42 year old son who defends their use! Unfortunately, the older generation doesn’t have all the answers to life problems. Youth knows it all!

Happy Holidays to All!!!

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