Did Rush Limbaugh's Cigar Smoking Cause His Lung Cancer?

By Alex Berezow, PhD — February 18, 2021

It's impossible to know for sure if Rush's cigar smoking caused his lung cancer, but it certainly increased the risk, even though cigar smokers don't inhale the smoke.

Two of my grandparents died of lung cancer.

My paternal grandmother (who was married to the Most Interesting Man in the World [2]) never smoked a day in her life. At the age of 70, she was one of the relatively few non-smokers to die of lung cancer. My maternal grandfather, on the other hand, not only smoked but worked in a coal mine and as a welder. He died at the age of 85.

So, what explains these outcomes? Most people might conclude that my grandfather practically guaranteed himself a death by lung cancer. Indeed, according to CA: A Cancer Journal for Clinicians [3], 82% of lung cancers are directly attributable to smoking. Though she didn't smoke, my grandmother lived an incredibly stressful life [4], having nearly starved to death in Ukraine by Joseph Stalin and having worked as slave labor in Nazi Germany. Maybe her cancer resulted from environmental exposure to some chemical during World War II, or maybe it was due to a lifetime of stress [5].

Or maybe their cancers were due to bad luck. The truth is -- in both cases -- we'll never know what caused the cancer. Nearly 1 in 5 (18%) of lung cancer patients never smoked, so it's possible that...
my grandfather would have developed lung cancer anyway. Statistics can capture patterns in cancer causation for a population, but it cannot determine the cause for any one individual. That's the tricky nature of statistics.

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Whenever somebody dies from lung cancer, the question asked (either out loud or silently) is, "Was (s)he a smoker?" Though (as we described above) the answer is not definitive, the reality still is that smokers are far likelier to get lung cancer than non-smokers. The American Lung Association reports[6] that men and women who smoke are 23 times and 11 times likelier to develop lung cancer than non-smokers, respectively.

There are several different kinds of lung cancer. Different sources provide different percentages, but roughly, squamous cell carcinoma accounts for 30% of lung cancers; adenocarcinoma (33%); small cell carcinoma (20%); large cell carcinoma (10%); and carcinoid tumors (2%). Smoking is most strongly associated with small cell carcinoma, even though it can cause all types of lung cancer[7] except for carcinoid tumors.

We don't know what type of lung cancer Rush Limbaugh had. He announced in February 2020 that he was diagnosed with "advanced lung cancer," which probably means Stage IV. Small cell carcinoma is notorious for remaining undetected until symptoms appear, and by that time, the disease has already metastasized (which is the definition of Stage IV). Perhaps this is the type of lung cancer that Rush had.

Assuming that it is, did Rush's cigar habit cause it?* Again, it's impossible to say with any certainty, but cigar smoking does increase the risk of lung cancer[8] (though not by as much as cigarette smoking, likely because cigar smokers don't inhale the smoke into their lungs). So, the answer ranges somewhere from "maybe" to "probably," but leaning more toward "probably." It's unsatisfactory, but that's the nature of statistics.

Love him or hate him; he was a legend in broadcast radio. He's basically the reason that people know the AM dial exists. RIP, Rush Limbaugh.

*Update on 18-Feb-2021 @ 2:45 pm PT: It was brought to my attention that Rush was a former smoker. This obviously increases his risk of lung cancer.