

Ontologies Classes Object Properties Data Properties Annotation Properties Individuals Datatypes Clouds

Class: **Marijuana_Smoking_LC**

Annotations (5)

- **rdfs:comment** "Does Marijuana Increase the Risk of Lung Cancer? Inhaling smoke of any kind is harmful to the lungs. A recent review was conducted of published research to assess the effects of inhaled marijuana on the lungs. The review included 48 journal articles across several countries. The data indicates that smoking marijuana increases the risk of lung cancer. In addition, the review showed smoking marijuana was associated with an increased risk of emphysema, spontaneous pneumothorax (collapsed lung), and chronic obstructive pulmonary disease (COPD).² However, there have been other studies that do not show a correlation between marijuana and lung cancer, so the evidence is inconclusive. There have been few long-term studies on the effects of marijuana smoking, mostly due to the legality of marijuana. More research is needed to determine the definitive effects of marijuana on lung function and the risk of lung cancer."
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- **rdfs:comment** "Does Smoking Marijuana Cause Lung Cancer? By Lynne Eldridge, MD Updated on March 06, 2023 Medically reviewed by Reza Samad, MD Print Table of Contents Research Effects Controversy Medical Marijuana Secondhand Smoke Smoking marijuana and the link to lung cancer isn't supported by the same body of research that makes clear the link between lung cancer and cigarette smoking. That said, studies continue to reveal new findings about the risks associated with smoking marijuana. Some marijuana users report respiratory symptoms like shortness of breath and wheezing due to marijuana use, and there are studies to suggest marijuana smoke causes lung damage. What's less clear are the long-term effects of marijuana use. This article presents some of the research on smoking marijuana and lung cancer, as well as some findings on how cannabis may help as a treatment for people living with cancer. effects of marijuana on the lungs Verywell / Brianna Gilmartin Studies on Marijuana and Lung Cancer A definitive link between marijuana and lung cancer has proven elusive. Early research studies found a higher risk of lung cancer in male marijuana smokers who also used tobacco, as well as an increased risk with long-term use leading to lung cancer in young adults. On the other hand, some evidence pointed to marijuana use having a protective effect. In 2015, a large international study found little association between habitual and long-term use of cannabis and lung cancer.¹ Some association was found between cannabis use and lung adenocarcinoma. None was found between cannabis use and squamous cell carcinoma of the lungs. A 2018 study published in the Journal of Thoracic Oncology summarized some of the difficulties both in knowing whether marijuana use is associated with lung cancer, and how well marijuana may work to control symptoms in people living with cancer.² Some of these factors are: The small size of the studies The self-reported nature of marijuana use The low numbers of heavy marijuana users included in studies The combination of tobacco smoking along with marijuana use The size and quality of studies on marijuana smoking and lung cancer make it difficult to arrive at firm conclusions. Effects of Marijuana on the Lungs Researchers have found that regular use of marijuana causes injury to the airways that can be seen visibly as well as under the microscope.³ People report increased respiratory symptoms such as: Wheezing Shortness of breath Persistent cough Yet marijuana use does not seem to cause any significant changes in lung function. It also doesn't appear to increase the risk of COPD, which is an independent risk factor for lung cancer. Marijuana Use and Lung Transplants A 2017 study looking at the effect of cannabis smoking on the quality of lungs to be used for transplant. It found that a history of cannabis did not have any effect on transplant outcomes, and that including former cannabis smokers could potentially improve the donor pool.⁴ Smoking marijuana does not appear to cause significant changes in lung function. Marijuana and Cancer Risk Controversy Since marijuana is still illegal in the U.S. under federal law, it is hard to do the controlled studies on smoking marijuana that have been done with tobacco. Because of this, it helps to look at what we do know about marijuana that suggest it could increase lung cancer risk:³ Many of the carcinogens and co-carcinogens present in tobacco smoke are also present in smoke from marijuana. Marijuana smoking does cause inflammation and cell damage, and it has been associated with pre-cancerous changes in lung tissue. Marijuana has been shown to cause immune system dysfunction, which could theoretically predispose individuals to cancer. Marijuana use most likely pales in comparison to cigarette smoking when it comes to cancer risk but it's best to practice caution. There are reasons beyond lung cancer risk to avoid marijuana, which remains illegal in many states. Marijuana and Pregnancy Studies suggest that marijuana use during pregnancy may lead to fetal harm, including congenital defects, developmental (learning) disabilities, and miscarriage. The effects may increase when marijuana is smoked, adding toxins that also are harmful.⁵ Marijuana in Cancer Patients The link between marijuana use and cancer also can mean marijuana as a treatment option rather than cause of lung cancer. Smoking marijuana may help some people cope with cancer. According to the National Cancer Institute, "cannabinoids may have benefits in treating cancer-related side effects."⁶ Some of the side effects that may improve with the use of weed include: Nausea Loss of appetite Pain Sleep disturbances Cancer cachexia—a combination of symptoms including loss of appetite, unintentional weight loss, and muscle wasting—is considered the direct cause of death in 20% of people diagnosed with cancer. So the potential of cannabinoids in cancer treatment deserves much further study.⁷ The difficulty in studying an illegal

substance has limited research. Some studies found that marijuana may have had a benefit in patients with a type of recurrent brain tumor.⁸ With trends toward legalization across the United States, this answer will become clearer in the future. An Overview of Cachexia in People With Cancer Secondhand Marijuana Smoke Marijuana use also may have secondhand smoke effects. Some studies have found marijuana smoke to be as much of a concern as tobacco smoke, so caution may be warranted.⁹ Until large studies can be performed, you can't be assured that smoking marijuana or being exposed to secondhand weed smoke has no health concerns. You have a variety of choices other than smoking for ways to use medical cannabis and recreational cannabis in states where it is legal. If you worry about your lung health and exposing nonsmokers, it may be best consider a different mode of delivery than smoking, such as edibles.¹⁰ Effects of Secondhand Marijuana Smoke Summary Marijuana use may increase your risk of lung cancer, but more research is needed to determine a clear link. Studies to date have delivered mixed results on whether and how marijuana smoke adds to the risk or, with some results, appears to have a protective effect against lung cancer. People report wheezing, coughing, and other respiratory symptoms with marijuana use. Some evidence shows that it can lead to precancerous changes in the lungs. However, questions remain about long-term damage. If using marijuana, you may wish to consider edibles and other alternatives. Cannabis remains an option for pain management in people living with cancer, as well as its use to improve appetite in the face of cancer cachexia complications. A Word From Verywell For people living with cancer, cannabis use may offer an alternative to opioid pain medications in some cases. The opioid crisis has added to concerns that people facing cancer-related pain are undertreated. It may be that the legalization of marijuana in many states, whether for recreational or medical use, has arrived at the right time to address this problem."

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- **rdfs:comment** "Like smoking tobacco, smoking weed or cannabis can also have damaging effects on the lungs, although research on the subject is not as clear-cut. Smoking is one of the biggest threats to lung health. The Centers for Disease Control and Prevention (CDC) Trusted Source report that cigarette smoking is responsible for over 480,000 deaths in the United States each year. Smoking cigarettes can have a number of negative effects on a person's lungs. These include: changing the function of the lungs impacting the lungs' structure increasing the risk of a number of serious medical conditions, including cancer Smoking cannabis can also cause damage to the lungs. This because the smoke from cannabis contains many of the same toxins, irritants, and carcinogens as tobacco smoke. In this article, we look at the effects of smoking cannabis on the lungs and compare them to the effects of smoking tobacco. The effects of smoking cannabis on the lungs Photo editing by Lauren Azor; Catherine Falls Commercial/Getty Images There is mixed evidence on the effects of cannabis smoke on the lungs. This is because of a relative lack of literature combined with concurrent tobacco smoking and the reports of conflicting outcomes. Coughing and sputum One study Trusted Source states that cannabis smoke can cause symptoms, such as increased coughing and sputum production, similar to those found in people who smoke tobacco. Another study Trusted Source states that the frequency of chronic cough, sputum, and wheezing was similar between cannabis smokers and tobacco smokers. The American Lung Association states that these symptoms arise due to cannabis smoke injuring the cell linings of the large airways. Bronchitis Swelling and inflammation in the bronchial tubes cause bronchitis. Acute bronchitis usually clears up on its own, while chronic bronchitis is persistent and may never go away. A person with this condition usually experiences the below symptoms: coughing wheezing while breathe difficulty breathing The American Lung Association says that cannabis smoke can cause a person to develop chronic bronchitis. A 2016 study Trusted Source also stated that smoking cannabis has links with symptoms of chronic bronchitis. Learn more about bronchitis here. Lung cancer There is differing evidence regarding the association between cannabis smoking and lung cancer. One 2013 study Trusted Source stated that people who used cannabis heavily were at an increased risk of developing lung cancer. Another study from 2012 Trusted Source outlines that cannabis smoke contains carcinogens, which can cause cancer. However, the study adds that there is no evidence that suggests that light or moderate cannabis smoking leads to an increased risk for the development of either lung or upper airway cancer. However, the same study states that the evidence is mixed when it comes to the cancer risks of heavy or long-term cannabis use. A 2014 study Trusted Source suggests there is biological plausibility of cannabis smoking as a risk for the development of lung cancer. However, it adds that it is difficult to link cannabis smoking and cancer development conclusively. Learn more about cannabis and lung cancer here."(xsd:string)
- **rdfs:comment** "Marijuana and Your Risk of Lung Cancer Written by Shawna Seed Medically Reviewed by Jennifer Casarella, MD on December 17, 2021 Why It Might Be Harmful Questions Remain The Future Marijuana, both for recreation and medical use, is becoming legal in more states. Even as more people use it, health experts aren't sure whether smoking pot raises your odds of getting lung cancer. Here's what researchers know -- and don't know -- about the connection. Why It Might Be Harmful The link between tobacco smoke and lung cancer is well-known. Studies show that marijuana smoke has many of the same harmful substances as tobacco, and often more of them. Among the hazards are: Benzo(a)pyrene Benz(a)anthracene Phenols Vinyl chlorides Nitrosamines Reactive oxygen species People also smoke marijuana in a different way than tobacco, possibly posing greater danger to the lungs: You usually inhale marijuana smoke deeply and hold it in, which gives the toxins more contact with your lung tissue and more chance to stick there. You generally smoke a joint all the way to the end. Tar, the sticky stuff left after burning, has high levels of harmful substances, and it's concentrated at the end of a joint. When scientists looked at lung tissue of some people who smoke marijuana regularly, they found changes that are known to

signal the future growth of cancer. Questions Remain Given what scientists already know, why is it so hard to say how smoking marijuana affects your chances of getting lung cancer? Studies that have looked for a direct link between the two have conflicting results -- some found evidence that ties marijuana to lung cancer, while other data show little to no connection. The topic is also tough to investigate. Scientists say a few factors limit how reliable the research is. Most of the research on marijuana dates to when it was still widely illegal. It's hard to gather information about behavior that's against the law. Most studies have asked people to report how often they smoked marijuana, and researchers know that these kinds of surveys, called "self-reported," aren't as reliable as when they collect data in other ways. That's because people don't remember their behavior perfectly or might underestimate or conceal how often they do something that others think is wrong. Related Illegal marijuana, unlike tobacco, doesn't have any controls on its strength or quality. People don't use the same amount in one "dose." That makes it hard for researchers to set standards to measure its effects. Another problem is that many people who smoke marijuana also smoke tobacco, sometimes mixed in the same cigarette. So if they get lung cancer, it's impossible to sort out what substance caused it. Some marijuana smokers in the studies have been fairly young, which could skew the results. Cancers can take time to grow. On the other hand, most people who use marijuana don't smoke as much as a tobacco user, which could lower their odds for a problem. Animal research suggests that some chemicals in marijuana work against tumor growth, which could explain why lung cancer isn't showing up as often as scientists might expect in people who smoke it. The studies on this are in their early days, and researchers need to take a deeper look into this theory. The Future Now that marijuana is legal in more places, growers are making the product more standard and stronger. More people are smoking it, too. Any link between marijuana smoking and lung cancer isn't clear now, but researchers have a chance to move beyond some of the problems that have made studies unclear in the past."(xsd:string)

- `rdfs:comment` "Marijuana use and risk of lung cancer: a 40-year cohort study Russell C Callaghan 1, Peter Allebeck, Anna Sidorchuk Affiliations expand PMID: 23846283 DOI: 10.1007/s10552-013-0259-0 Abstract Purpose: Cannabis (marijuana) smoke and tobacco smoke contain many of the same potent carcinogens, but a critical-yet unresolved-medical and public-health issue is whether cannabis smoking might facilitate the development of lung cancer. The current study aimed to assess the risk of lung cancer among young marijuana users. Methods: A population-based cohort study examined men (n = 49,321) aged 18-20 years old assessed for cannabis use and other relevant variables during military conscription in Sweden in 1969-1970. Participants were tracked until 2009 for incident lung cancer outcomes in nationwide linked medical registries. Cox regression modeling assessed relationships between cannabis smoking, measured at conscription, and the hazard of subsequently receiving a lung cancer diagnosis. Results: At the baseline conscription assessment, 10.5 % (n = 5,156) reported lifetime use of marijuana and 1.7 % (n = 831) indicated lifetime use of more than 50 times, designated as "heavy" use. Cox regression analyses (n = 44,284) found that such "heavy" cannabis smoking was significantly associated with more than a twofold risk (hazard ratio 2.12, 95 % CI 1.08-4.14) of developing lung cancer over the 40-year follow-up period, even after statistical adjustment for baseline tobacco use, alcohol use, respiratory conditions, and socioeconomic status. Conclusion: Our primary finding provides initial longitudinal evidence that cannabis use might elevate the risk of lung cancer. In light of the widespread use of marijuana, especially among adolescents and young adults, our study provides important data for informing the risk-benefit calculus of marijuana smoking in medical, public-health, and drug-policy settings."(xsd:string)

Superclasses (1)

- Smoking_LC

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