

CORONAVIRUS HARMS ARE SEVERELY ELEVATED BY MARIJUANA USE AND MARIJUANA SALES

Hundreds of businesses in cities such as Los Angeles, San Francisco and New York are closed due to the coronavirus outbreak, however, “medical” marijuana stores remain open as officials revise public health orders to include cannabis as an essential medicine.

From <https://www.newsweek.com/la-residents-cannabis-california-lockdown-dispensaries-essential-business-1493394>; <https://apple.news/AcM8jbg4qQqaZJwv73oZCIA>

Who is Vulnerable to Coronavirus (COVID-19)?

Is keeping marijuana stores open a good policy? The science shows that it is not.

The Centers for Disease Control states that the people at high risk of getting very sick or dying from COVID-19 include:

1. Older adults
2. People who have serious chronic medical conditions like:
 - Heart disease
 - Diabetes
 - Lung disease
 - Asthma - People with asthma may be at higher risk of getting very sick. COVID-19 can affect your respiratory tract (nose, throat, lungs), cause an asthma attack, and possibly lead to pneumonia and acute respiratory disease.

This means that if your immune system is impaired or you have lung or respiratory problems you are very vulnerable.

From: <https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-risk-complications.html>

What does the science say about marijuana use and impaired immune function or lung and respiratory problems? A comprehensive study of the dangers of marijuana smoke by the Hazard Assessment Branch of the California Environmental Protection Agency concluded in part that:

There is evidence that marijuana smoke is genotoxic, immunosuppressive, and can alter endocrine function. Studies of 9-THC and other cannabinoids provide evidence for alterations of multiple cell signaling pathways, in endocrine function, and suppression of the innate and adaptive immune response. Prolonged exposures to marijuana smoke in animals and humans cause proliferative and inflammatory lesions in the lung.

From: Evidence on the Carcinogenicity of Marijuana Smoke, August 2009, Reproductive and Cancer Hazard Assessment Branch Office of Environmental Health Hazard Assessment, California

Environmental Protection Agency, page 85; <https://oehha.ca.gov/media/downloads/proposition-65/chemicals/finalmjsmokehid.pdf>

One of the most serious findings in marijuana research was the effect of marijuana on various immune functions. Cellular immunity is impaired, pulmonary immunity is impaired, and impaired ability to fight infection is now documented in humans. This impairment leaves the patient unable to fight certain infections and fatal diseases. The potential for these complications exists in all forms of administration of marijuana. Habitual smoking of marijuana has a number of effects on the respiratory and immune systems including alterations in lung function, increased prevalence of acute and chronic bronchitis and airway injury.

*From: Tashkin, Donald; Baldwin, Gayle; Sarafian, Theodore; Dubinett, Steven; Roth, Michael; "Respiratory and Immunologic Consequences of Marijuana Smoking," *The Journal of Clinical Pharmacology*, First published: 16 January 2014; <https://accpl.onlinelibrary.wiley.com/doi/abs/10.1002/j.1552-4604.2002.tb06006.x>*

A study published in the prestigious New England Journal of Medicine states:

We conclude that smoking marijuana, regardless of tetrahydrocannabinol content, results in a substantially greater respiratory burden of carbon monoxide and tar than smoking a similar quantity of tobacco.

*From: Wu et al., Pulmonary hazards of smoking marijuana as compared with tobacco, (*N Engl J Med* 1988;318:347-51.); <https://www.nejm.org/doi/full/10.1056/NEJM198802113180603>*

An author of a book on marijuana and medicine concludes:

Marihuana has been shown to decrease host resistance to bacterial, protozoan, and viral infections in experimental animal models and in vitro systems. Recent immuno epidemiological studies suggest that marihuana may also influence the outcome of viral infections in humans. The main substance in marihuana that exerts these immuno depressive effects is its major psychoactive constituent Δ^9 -tetrahydrocannabinol (THC).

*From: Cabral, Guy; *Marihuana and Medicine* pp 317-325 "Marihuana and the Immune System." 1999; https://link.springer.com/chapter/10.1007/978-1-59259-710-9_32*

Contaminants of marijuana smoke are known to include bacteria, molds and fungi. Those at particular risk for the development of infection due to inhaling marijuana smoke are people with impaired immunity. For example, Aspergillus is a group of molds that can cause allergy-type illnesses to life-threatening generalized infections. Aspergillus is found in marijuana and can cause illness in marijuana users.

This is thought to be due to the direct inhalation of fungal spores that are present on the surface of the plant. The heating of cannabis buds may not be sufficient for sterilization and so users (particularly those with compromised immune systems) are potentially exposed to life threatening pulmonary infection.

From: Le Sueur, Helen; "Marijuana use and aspergillosis" National Aspergillosis Centre, November 2016, <https://www.aspergillus.org.uk/content/marijuana-use-and-aspergillosis>

Marijuana Contamination Poses Serious Risks to Health

A study done at the University of California discovered that medical marijuana from 20 dispensaries contained multiple fungal and bacterial contaminants that can cause serious and sometimes fatal infections among marijuana users. Smoking, vaping or inhaling aerosolized marijuana is a serious health risk, especially for people with chronic conditions or other conditions requiring immunosuppressing therapies. The study revealed a multitude of microorganisms, many of which are known causes of serious lung infections, including *Cryptococcus*, *Mucor*, and *Aspergillus* fungi.

Heating marijuana by smoking or vaporizing may not sterilize it. Viable organisms have been cultured from smoke suggesting that temporary exposure to heat or attempts at filtration are probably insufficient to protect the compromised host.

The authors of the study conclude:

Our results suggest that handling marijuana in any form might expose the patient to a number of both bacterial and fungal pathogens well known to cause serious infections in the immunocompromised population. Smoking or vaporization provides a direct portal of entry into the terminal bronchioles and alveoli. Moreover, the recovery of these organisms in a symptomatic patient would be unlikely to initiate a search for unusual exposures. *Aspergillus* and other molds may therefore be attributed to breakthrough infection, and recovery of Gram-negative bacilli would be attributed to healthcare-associated pneumonia and/or a failure of prophylaxis.

From: UC Davis. Clinical Microbiology and Infection, titled, "A microbiome assessment of medical marijuana." https://health.ucdavis.edu/medmicro/pdfs/news-events/Thompson-et-al_Marijuana-microbiome_CMI-2017.pdf

See also: www.civel.org, submissions to the FDA," The Failures of the States to Regulate Marijuana, Studies Show That Marijuana Products Have High Levels of Contaminants Including Pesticides, Fungus and Heavy Metals and Solvents"

Vaping

Use of vaping devices such as those used for vaping marijuana are causing deaths and serious lung disease called Vaping Associated Lung Injury (EVALI). Many of these cases are caused by the use of THC extract products in vaping devices. THC is the addictive psychoactive mind-altering compound of marijuana that produces the "high." Having vaping lung injury will hurt your chances of survival if you get COVID-19.

*From: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html;
<https://www.psychologytoday.com/za/blog/balanced/202001/vaping-and-evali> (Posted Jan 31, 2020);*

<https://www.fda.gov/tobacco-products/products-ingredients-components/vaporizers-e-cigarettes-and-other-electronic-nicotine-delivery-systems-ends>

This may be especially true with young people who vape marijuana.

From: <https://www.dailymail.co.uk/health/article-8136069/Experts-question-vaping-drives-rise-young-Americans-COVID-19.html>

Can marijuana use open your body up to a virus?

A study from Harvard Medical School showed that marijuana use opens the door for the virus that causes Kaposi's Sarcoma. This is a serious life-threatening problem for people with HIV infection. The major active component of marijuana could aid the Kaposi's sarcoma virus in infecting cells and multiplying, according researchers. They report that low doses of THC, equivalent to that in the bloodstream of an average marijuana smoker, could be enough to facilitate infection of skin cells and could even foster malignancy. "These findings raise some serious questions about using marijuana, in any form, if you have a weakened immune system," said lead study author Jerome E. Groopman, M.D., professor of medicine at Harvard Medical School. "

From: "Marijuana Component Opens the Door for Virus That Causes Kaposi's Sarcoma" -Science Daily, 2 August 2007; <https://www.sciencedaily.com/releases/2007/08/070801112156.htm>

Damage to Our Emergency Health Care System

In addition to the damage to marijuana users that results from marijuana use, there are problems that marijuana use causes the health care system. We do not need more overloading of our health care system. Here are some examples of how it effects our health care system:

Emergency rooms in states that have legalized marijuana have to deal with Cannabinoid Hyperemesis Syndrome. CHS is a condition with recurrent bouts of severe nausea, vomiting, and dehydration. CHS usually occurs in people under 50 years of age and with a long history of marijuana use. CHS can lead users to make frequent trips to the emergency room, but can be resolved when a person stops using marijuana. CHS which can result in kidney failure.

From: Galli JA, Sawaya RA, FriedenberG FK. Cannabinoid Hyperemesis Syndrome. *Curr Drug Abuse Rev.* 2011;4(4):241-249. <https://www.ncbi.nlm.nih.gov/pubmed/22150623>

Colorado legalized marijuana in 2009 and since then the rate of CHS has doubled.

From: Sorensen CJ, DeSanto K, Borgelt L, Phillips KT, Monte AA. Cannabinoid Hyperemesis Syndrome: Diagnosis, Pathophysiology, and Treatment-a Systematic Review. *J Med Toxicol.* 2017;13(1):71-87; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5330965/>; <http://www.bumc.bu.edu/emergencymedicine/files/2016/08/MJ-legalization-and-impact-on-EM-care.pdf>

Marijuana Exposures Increase

The rate of marijuana exposures among children under the age of six increased by 610% in the “medical” marijuana states according to a study published in Clinical Pediatrics. The data comes from the National Poison Data System. 75% percent of the children ingested edible marijuana products such as marijuana-infused candy. Clinical effects include drowsiness or lethargy, ataxia [failure of muscle coordination], agitation or irritability, confusion and coma, respiratory depression, and single or multiple seizures.

From: <http://journals.sagepub.com/doi/full/10.1177/0009922815589912>

Toddlers with Lung Inflammation

In Colorado one in six infants and toddlers hospitalized for lung inflammation are testing positive for marijuana exposure. This has been a 100% increase since legalization. Non-white kids are more likely to be exposed than white kids.

From: <https://www.sciencedaily.com/releases/2016/04/160430100247.htm>

Teen ER Visits

Marijuana related emergency room visits by Colorado teens is substantially on the rise. They see more kids with psychotic symptoms and other mental health problems and chronic vomiting due to marijuana use.

From: <https://www.reuters.com/article/us-health-marijuana-kids/marijuana-related-er-visits-by-colorado-teens-on-the-rise-idUSKBN1HO38A>

Marijuana Use and Its Effect on Emergency Care

Data from the Colorado Hospital Association, a group of more than 100 hospitals, shows that the prevalence of hospitalizations for marijuana exposure in patients aged 9 years and older doubled after the legalization of medical marijuana and that ER visits nearly doubled after the legalization of recreational marijuana. In the years after both medical and recreational marijuana legalization, the call volume for marijuana exposure (poisoning) doubled compared with that during the year before legalization

From: Kim HS, Monte AA. Colorado cannabis legalization and its effect on emergency care. Ann Emerg Med. 2016;68:71-75;

https://search.aol.com/aol/search?q=http%3a%2f%2fcolorado%2520cannabis%2520legalization%2520and%2520its%2520effect%2520on%2520emergency%2520care%2e&s_it=loki-dnserror

Marijuana use also results in people having mental illness including anxiety, psychotic breaks and schizophrenia many of whom wind up in emergency rooms. An article published in the British Journal of Psychiatry states:

It is now incontrovertible that heavy use of cannabis increases the risk of psychosis. There is a dose-response relationship and high potency preparations and synthetic cannabinoids carry the greatest risk.

*From: <https://www.readbyqxd.com/read/29557759/cannabis-and-psychosis-what-do-we-know-and-what-should-we-do>; <https://www.drugabuse.gov/publications/drugfacts/marijuana> August 2017
See also: www.civel.org, *submissions to the FDA*; “*Marijuana and Mental Illness*”*

Conclusion

In these times of peril from infection by the COVID-19 virus, marijuana use is very unwise and certainly should not be used as a medicine for anyone at risk of getting COVID-19. Marijuana use hurts the users and contributes to overloading our health care system.

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A REPORT BY NEW JERSEYANS AGAINST LEGALIZING MARIJUANA

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