



In Brief: A Physician's Thoughts on Medical Cannabis and Vaping

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As many of you are surely aware, there has been an increasing number of reported adverse events, including deaths, regarding patients/consumers that have used vaporized forms of both nicotine and cannabis. These events have occurred rapidly across North America to what has led to a very disturbing, and not well understood, trend of vaping related consumer illnesses. My hope in this brief article is twofold; first, to address the basics of WHY vaping is causing injury/illness, and secondly, from a cannabis perspective, to help patients better understand the ALTERNATIVE ROUTES of administration to vaping.

To begin, we must try to understand where in the actual problem lies with vaping....and how specifically it is causing harm to consumers. According to a report by the Center's for Disease Control (CDC)... *"No one compound or ingredient has emerged as the cause of these illnesses to date; and it may be that there is more than one cause of this outbreak. Many different substances and product sources are still under investigation. The specific chemical exposure(s) causing lung injuries associated with e-cigarette product use, or vaping, remains unknown at this time."* This statement I believe is very clear in its message: right now, we don't exactly know what the problems with vaping are. Some evidence has pointed to ideas such as the suspension, for example vaporized products suspended in Vitamin E oil bases. Alternatively, recent research has shown more of an acute lung related injury or insult which occurs and is independent of the suspension product. Regardless, the evidence thus far is clear in one definitive fashion....We really don't know exactly what is causing these vaping related illnesses, and it very well could be a combination of multiple factors.

Understanding now, that at this moment in time, we do not have all the answers we need, the question then is "what to do." When addressing this question, I think there are a number of factors to be considered. First, what are the laws and regulations in the state in which you reside. In many states, vaporization of the actual cannabis flower (vs the extracted and concentrated forms) may offer patients who wish to use cannabis via an inhaled route of administration an alternative option. We also see alternative inhaled options now available in the medical cannabis space. For example, cannabis administered via a Metered Dose Inhaler (MDI), similar to asthmatics with albuterol. However, caution should be maintained with these newer products, as like vaping products, we do not have a large amount of definitive or long-term safety data available. As a final alternative, consumers should understand that cannabis can be consumed via alternative routes, and that it does not need to be vaporized or smoked in order to be effective. For example, using cannabis preparations via the oral, sublingual, topical, or transdermal routes may offer an alternative yet effective route of administration

versus the inhaled or vaporized route. For all cannabis related products, vaporized or not, all consumers and patients should have access to the products lab testing (i.e. COA) as well as complete ingredient list, which should be reviewed in depth prior to consumption.

In summary, vaporized related illness and injury has become a real concern within the medical cannabis community. As things stand today, more information is needed, and we as a scientific and medical community do not have the exact answers as to the cause of this injury and related illness. The hope and belief are that these answers will be found; we just do not know when. In the interim, patients and consumers need to maintain their own due diligence and use caution if and when choosing to use a vaporized form of cannabis. Additionally, it is imperative to understand that cannabis can be used medicinally and therapeutically WITHOUT having to inhale smoke or use vaporized forms, and that the alternative routes of administration outlined above can be effective alternatives to vaping.

For the complete CDC update, please visit https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html