**Underwriting: Marijuana and e-Cigarettes**

An increasingly discussed area in life insurance circles is the manner in which marijuana and e-cigarettes are addressed by life insurance carriers. There are ramifications for both relative to medical underwriting and there are financial underwriting issues surrounding marijuana.

**Background**

E-cigarettes are plastic and metal devices that heat a liquid nicotine solution in a disposable cartridge creating vapor that the user inhales. Surprisingly, the first e-cigarette was patented as early as 1963, but it only became popular after a 2003 patent.[[1]](#endnote-1) Tobacco use remains high. Although it has dropped significantly in the US since the 1964 Surgeon’s General Report (a drop among adults from 43% in 1965 to 19% in 2014) usage remains high. Nearly 50 million Americans still use some form of tobacco with 443,000 smoking attributed death each year (10% attributed to second hand smoke). Worldwide there is an estimated 1.2 billion tobacco users with 6 million tobacco-related deaths annually. E-cigarette usage is only a small fraction of sales compared to traditional cigarettes (about 20% have tried e-cigarettes). Sales approached $2 billion in the US in 2013, but are forecast to rise to $10 billion in the next several years.

There are significant differences between traditional tobacco and e-cigarettes. There are over 7,000 know toxins and carcinogens in tobacco. By contrast, the toxic substances in e-cigarettes are lower. An analysis of 12 different types of e-cigarettes show toxic substances at levels 9 to 450 times lower; nicotine concentrations range from 7.4 to > 18mg/e-cig cartridge.[[2]](#endnote-2) Still, there is no long term analysis of the effects of e-cigarettes. Nor is there any regulation or oversight of their manufacture; and no guidelines relative to sterile manufacturing. There are currently (2014) over 200 manufacturers each using widely different standards. Currently only e-cigarettes that are marketed for therapeutic purposes are regulated by the Food & Drug Administration (FDA). However, the FDA is expected to treat e-cigarettes akin to tobacco.

Marijuana is the most common illicit drug used in the United States accounting for over 75% of all current illicit drug use. In the US, about 5 million use it frequently (at least 51 days per year). The Federal government considers marijuana a Schedule I substance (having no medicinal uses and high risk for abuse). That aside, two states have legalized marijuana for adult recreational use and 21 states have passed laws allowing its use as a treatment for certain medical conditions. Among the possible benefits are autoimmune disease (inflammation and pain), seizures and substance abuse). These continue to be tested in National Institute for Health (NIH) studies.

**Medical Underwriting**

From a medical perspective, e-Cigarettes have not been fully studied so consumers and insurers currently don’t know the potential risks of e-cigarettes when used as intended and how much nicotine or other potentially harmful chemicals are being inhaled during use. Although the harmful effects of traditional cigarette smoking lies in the tobacco leaf and other chemicals, most carriers have limits on both cigarette smoking and tobacco in any other form, such as chew.

For many carriers e-cigarette use falls into the “other form of tobacco product.” Typically nicotine is detected through tests of a proposed insured’s urine. If the nicotine content in urine is negative then a no-tobacco rating is often available. However, If the nicotine is present in one’s urine (positive) the some form of tobacco rates will usually be offered. It will be difficult for an underwriter to determine if an individual is using e-cigarettes or traditional tobacco products. As such, from a medical underwriting perspective there is little advantage to use e-cigarettes.

There is some speculation that in the future carriers may be able to offer rates for e-cigarette use that would be better than tobacco use rates, but higher than no-tobacco use rates.[[3]](#endnote-3) However, that is likely to be some years away, requiring long-term controlled studies of e-cigarette users compared to control populations.

Unlike e-cigarettes, for marijuana there is a wide understanding of its medical underwriting implications. Marijuana contains a number of Tetrahydrocannabinol (THC) like intoxicants that are immediately taken up by fat cells, stored and then released slowly over time. THC may be detectable anywhere from 3 days to a month later. By contrast, alcohol contains only one intoxicant, ethanol, that is not stored in the body and is metabolized in a linear, predictable, fashion. As a result, there is no reliable method to quantify marijuana impairment, although plasma levels are being tested in Colorado. It’s worth noting that THC levels in marijuana today are close to 15% (compared to 4% in the 1980s).

From a medical underwriting standpoint it is difficult to distinguish between inhaled and ingested forms. As a result, both forms are generally treated the same for underwriting purposes. Among the concerns associated with marijuana use are 1) altered perceptions and mood, 2) impaired and difficulty with thinking and problem solving, 3) impaired motor skills and 4) when used heavily by young people its effects on cognitive skills and memory may be long-term or permanent as well as having an addiction potential. Related to mental impairment judgment and motor coordination is the increased risk of injury and death while driving. Chronic marijuana use is also linked to mental illness. Additionally, marijuana users have an increased risk of heart attack in the first hour after taking the drug. In its inhaled form, marijuana remains an irritant to the lungs, can have many of the same respiratory effects as experienced by tobacco smokers. Use in pregnancy can trigger issues in fetal neurological development as well as post-partum neurological issues.

As far as underwriting, most carriers will treat marijuana the same for both illicit and prescription use. Most will treat users as some form of smoker rate (because of the inability to distinguish between ingested and inhaled forms. For many carriers marijuana that is less than once per month should be able to obtain a smoker rate, possible preferred. As use increases to 2 joints per week the underwriting category may be reduced to Standard smoker. At more than 2 per week that rate may slide to mild substandard rate.

Financial Underwriting Considerations

Financial Underwriting where marijuana is involved can be problematic. Because marijuana remains a controlled substance under Federal law, transacting business involving marijuana is considered illegal. In June 2011, the U.S. Department of Justice issued a memo conveying the consequences of those individuals caught cultivating, selling or distributing marijuana, and those who engage in transactions involving the proceeds of such activity may also be in violation of federal money laundering statutes and other federal financial laws. Subsequently, most financial institutions have chosen to deny access to financial services for marijuana dispensaries. As a result, man legal marijuana dispensary businesses are often conducted as cash-based business, as they have difficulty opening and/or maintaining bank and investment accounts. Similarly, American Express, MasterCard and Visa have all opted not to accept credit cards for the payment of marijuana purchases. This topic is currently under discussion with the Department of the Treasury, Department of Justice and various financial regulators. It is anticipated that official government guidance will be rendered on this topic in the future.

This presents a current dilemma relative to financial underwriting any business or individuals involved in transacting marijuana related businesses. It becomes difficult to determine what assets an entity or individual in these activities hold, even if legal at the state level. Some carriers will not consider cases involving marijuana and others will reconsider cases in the event facts involving the marijuana trade become known after policy issue.

1. Many of the statistics quoted here are from a presentation, Vapor and Herb in the Breeze, by Dr. Bruce Hendricks on March 29, 2014 at the Risk Appraisal Forum. [↑](#endnote-ref-1)
2. The highest concentrations approach the same concentration as a nicotine patch. [↑](#endnote-ref-2)
3. Ibid, note one. [↑](#endnote-ref-3)