

### Marijuana Use and Cardiovascular Health (1)—APPROVED MESSAGES

	Evidence Reviews				APPROVED MESSAGES
	Colorado Report Review Article, 2014 (pp. 135-141)	RAND report Evidence review, 2015 (pp. 32, 35)	Institute of Medicine Review Article, 1999 (pp. 121-122)	Oregon: Washington county report, 2014 (pp. 9, 33)	Oregon Public Health Division Approved Messages
<b>Myocardial infarction (heart attack)</b>	<b>LIMITED</b> evidence that <b>acute</b> marijuana use increases risk of myocardial infarction. <sup>1,2</sup>			Smoking marijuana is a <b>rare</b> trigger of acute myocardial infarction. <sup>1</sup>  The risk of myocardial infarction <b>increased 4.8 times</b> over baseline compared with periods of non-use and onset occurred within one hour of smoking marijuana. <sup>1,3</sup>	Acute marijuana use may be associated with increased risk of heart attack among adults.
<b>Death related to myocardial infarction (heart attack)</b>	<b>INSUFFICIENT</b> evidence that <b>acute</b> marijuana use increases risk of death related to myocardial infarction (heart attack)/cardiovascular event. <sup>4,5</sup>	Marijuana’s chronic effects on cardiovascular functioning are <b>inconsistent</b> across studies, but there is some evidence that serious acute effects are possible. Hall categorized descriptions that Hartung et al. gave of			

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		the <b>deaths</b> of two young men that were plausibly attributable to “ <b>acute cardiovascular complications</b> evoked by smoking cannabis” separately as a cardiovascular event, not overdoses. <sup>6,7</sup>			
<b>Stroke (ischemic)</b>	<b>LIMITED</b> evidence that marijuana use increases risk of ischemic stroke. <sup>8,9,10</sup>				Marijuana use may be associated with increased risk of stroke.

### DEFINITIONS

*From Colorado Report Review Article 2014*

#### Levels of marijuana use

- Heavy marijuana use = daily or near daily (5-7 days/week)
- Regular marijuana use = weekly (1-4 days/week)
- Occasional marijuana use = less than weekly
- Acute marijuana use = used within the last hour
- Any level of use = evidence for all of the above

#### Age groups

- Young adult = 18 through 24 years of age
- Adult = 25 through 64 years of age
- Older adult = 65 years of age or older

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### REFERENCES

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- <sup>2</sup> Jouanjus, E., et al., *Cannabis use: signal of increasing risk of serious cardiovascular disorders*. J Am Heart Assoc, 2014. **3**(2): p. e000638.
- <sup>3</sup> Desbois, A.C. and P. Cacoub, *Cannabis-associated arterial disease*. Ann Vasc Surg, 2013. **27**(7): p. 996-1005.
- <sup>4</sup> Mukamal, K.J., et al., *An exploratory prospective study of marijuana use and mortality following acute myocardial infarction*. American heart journal, 2008. **155**(3): p. 465-70.
- <sup>5</sup> Frost, L., et al., *Marijuana use and long-term mortality among survivors of acute myocardial infarction*. American heart journal, 2013. **165**(2): p. 170-5.
- <sup>6</sup> Hall, Wayne, *What Has Research over the Past Two Decades Revealed About the Adverse Health Effects of Recreational Cannabis Use?* Addiction, 2014.
- <sup>7</sup> Hartung, Benno, Silke Kaufenstein, Stefanie Ritz-Timme, and Thomas Daldrup, *Sudden Unexpected Death Under Acute Influence of Cannabis*, Forensic Science International , Vol. 237, April 2014, pp. e11–e13.
- <sup>8</sup> Wolff, V., et al., *Cannabis use, ischemic stroke, and multifocal intracranial vasoconstriction: a prospective study in 48 consecutive young patients*. Stroke; a journal of cerebral circulation, 2011. **42**(6): p. 1778-80.
- <sup>9</sup> Geller, T., L. Loftis, and D.S. Brink, *Cerebellar infarction in adolescent males associated with acute marijuana use*. Pediatrics, 2004. **113**(4): p. e365-70.
- <sup>10</sup> Barber, P.A., et al., *Cannabis, ischemic stroke, and transient ischemic attack: a case-control study*. Stroke; a journal of cerebral circulation, 2013. **44**(8): p. 2327-9.