

Public health consequences of marijuana legalization in Oregon

Oregon Poison Center calls

Highlights

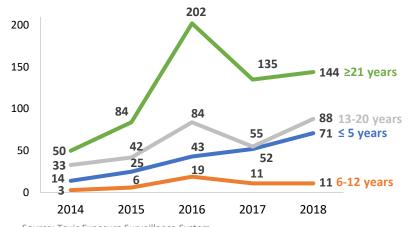
- Marijuana-related calls to the Poison Center were fairly stable from 2013 through quarter 1(Q1) 2015, and began a steady increase starting in Q2 2015 (Figure 1)
- Calls peaked in Q2 2016, decreased sharply through Q1 2017, and gradually increased through 2018
- There were 103 marijuana-related calls in 2014, 158 in 2015, 348 in 2016, 254 in 2017, and 316 in 2018 (not shown)

Figure 1. Quarterly marijuana-related calls to the Oregon Poison Center, 2013–2018



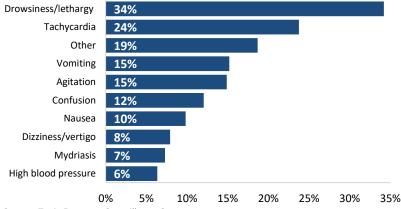
Oregon Poison Center, Oregon Health and Science University

Figure 2. Annual marijuana-related calls to the Oregon Poison Center by age group, 2014–2018



Source: Toxic Exposure Surveillance System, Oregon Poison Center, Oregon Health and Science University

Figure 3. Top clinical effects reported in marijuana-related calls to Oregon Poison Center, 2018



Source: Toxic Exposure Surveillance System, Oregon Poison Center, Oregon Health and Science University

Highlights

- Counts of marijuana-related calls to the Oregon Poison Center increased across all age groups from 2014 to 2018, with the largest increase among those aged 21 years and older (Figure 2)
- Calls decreased in all age groups from 2016 to 2017, except among children aged 5 years and younger
- However, calls increased again in 2018 for those aged 13 years or older after declines in 2017.
- The most common clinical effect reported in marijuana-related calls to the Oregon Poison Center was drowsiness or lethargy (34%) (Figure 3)
- Additional clinical effects reported to the Oregon Poison Center included tachycardia (racing heartbeat, 24%), vomiting (15%), being agitated or irritable (15%), and confusion (12%). Less-frequent clinical effects reported included nausea (10%), dizziness or vertigo (8%), mydriasis (dilation of eye pupils, 7%), and high blood pressure (6%).



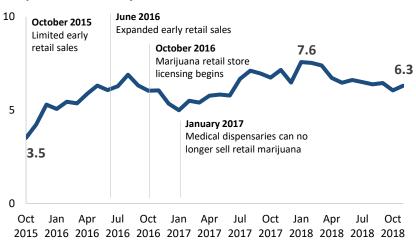
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Emergency department visits

Highlights

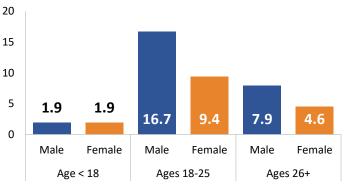
- From October 2015 through November 2018, the rate of emergency department (ED) visits with marijuana-involved codes or text descriptions increased from 3.5 per 1,000 visits to 6.3 per 1,000 visits (Figure 4)
- Visits decreased slightly in 2018 after a peak of 7.6 per 1,000 visits in January 2018
- During this 3-year period, there were 39,521 marijuana-involved ED visits in Oregon

Figure 4. Monthly marijuana-involved emergency department visits per 1,000 visits, Oct 2015-Nov 2018



Source: Oregon Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE)

Figure 5. Marijuana-involved emergency department visits per 1,000 visits by age and sex, Oct 2015-Nov 2018



Source: Oregon Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE)

Traffic fatalities

- Between 2012 and 2016 there were a total of 81 fatal crashes in Oregon with an involved driver that tested positive for marijuana
- The majority (62%) of Oregon marijuanainvolved traffic fatalities during this period also involved driver use of alcohol and/or other drugs

For more information

See Oregon Public Health Division's website "Marijuana and Your Health" http://www.healthoregon.org/marijuana

Highlights

- From October 2015 to November 2018, the rate of emergency department visits with marijuanainvolved codes was highest among males aged 18 to 25 years (16.7 marijuana-related visits per 1,000 ED visits) (Figure 5)
- Marijuana-involved ED visit rates were lowest among youth (people younger than 18 years)

Marijuana arrest rates among adults

- Marijuana arrest rates have decreased in the past five years, from a peak of 35 arrests per 100,000 adults in 2011 to three arrests per 100,000 adults in 2016
- In 2015, the highest rate of marijuana arrests occurred among those aged 20 to 24 years
- From 2010 to 2014, the rate of marijuana arrests among African Americans/Blacks was between two and three times higher than the rate among whites. In 2015, it was still more than 50% higher than among whites