## **Estimates of Medical Marijuana Users in Florida**

## **Version II:**

Shaded columns are updated to align with the new constitutional amendment (15-01)

- Reference period updated from April 1, 2015 to April 1, 2017.
- Conditions added:
  - Epilepsy
  - Posttraumatic Stress Disorder (PTSD)
- Conditions removed:
  - Hepatitis C
- Changes in conditions: "other conditions" as per 13-02 replaced with "...or other debilitating medical conditions of the same kind or class as or comparable to those enumerated" as per 15-01.

## A. Summary of estimates of medical marijuana users in Florida in 2017 by various estimation approaches

The Florida Legislature's Office of Economic and Demographic Research (EDR) developed six approaches that estimate the potential number of medical marijuana users in Florida as of April 1, 2017. Approach I draws on the experience of other states. Approaches II – V attempt to capture eligible users with the specified medical conditions in the proposed ballot initiative, except "other conditions." It is not possible to precisely estimate the number of users that would qualify under "or other debilitating medical conditions of the same kind or class as or comparable to those enumerated" as these conditions are currently unknown and to be determined by the physician when he or she believes that the medical use of marijuana would likely outweigh the potential health risks for a patient. Approach VI uses the number of illicit recreational marijuana users as a guide.

### Estimates of Potential Florida Medical Marijuana Users

		UPDATED
Estimation Approach	April 1, 2015 under 13-02	April 1, 2017 under 15-01
I. States with medical marijuana laws	452 to 417,252	1,586 to 440,552
II. Disease prevalence	1,295,922	2,038,131
III. Disease incidence	116,456	130,237
IV. Use by cancer patients	173,671	247,689
V. Deaths	46,903	47,805
VI. Self-reported marijuana use	1,052,692 to 1,619,217	1,168,775 to 1,752,277
Range	452 to 1,619,217	1,586 to 1,752,277

## B. Description of estimation approaches

## I. Medical marijuana registrants in states that have legalized medical use of marijuana

Approach I applies rates of medical marijuana use from other states to Florida's 2017 projected population. Using the current experience of 20 other states, there may be an estimated **1,586 to 440,552 Floridians using medical marijuana in 2017**. The lower range of the estimate is more likely if the medical marijuana program is rolled out slowly, such as in New Jersey, or faces implementation, administrative, and/or legal challenges that will limit the number of registrants in the first year. The higher range of the estimate may be more likely at full implementation of a more mature program, such as in Colorado. The estimation assumes usage rates will remain the same.

Version II update (10/12/2015):

- Reference period updated from April 1, 2015 to April 1, 2017.
- This analysis assumes users under CS/CS/SB1030 from Florida's 2014 Legislative session are encompassed in these estimates.
- This approach considers overall marijuana usage rates for medical purposes for any condition approved in the respective states, so there was no need to adjust it to account for the changes in medical conditions in the new constitutional amendment (15-01).
- Florida has an open-ended "other debilitating conditions..." statement that the analysis found is most similar to laws in California and Massachusetts. It appears that most other states do not have open-ended language, but have a process for adding or approval of new conditions by the respective departments of health.

# Estimated Marijuana Users for Certain Medical Conditions in Florida Based on Registered Users in States with Legalized Marijuana for Medical Conditions Ranked by Estimated Florida Users in 2017

Α	В	С	D	E	F	G	Н	I
								UPDATED
State	Year Passed <sup>1</sup>	Report Date	Patient Registry	Marijuana Users <sup>2</sup>	Population <sup>3</sup> (2014)	Percent of Population (2014)	Users per 1,000 Population (2014)	Florida Estimates (2017) <sup>4</sup>
Colorado	2000	2014	Mandatory	115,467	5,355,866	2.16%	22	440,552
Michigan	2008	2015	Mandatory	175,434	9,909,877	1.77%	18	361,755
Oregon	1998	2014	Mandatory	70,139	3,970,239	1.77%	18	361,004
California	1996	2014	Voluntary	572,762	38,802,500	1.48%	15	301,636
Washington	1998	2014	Voluntary	103,444	7,061,530	1.46%	15	299,347
Montana	2004	2014	Mandatory	10,268	1,023,579	1.00%	10	204,990
Hawaii	2000	2012	Mandatory	13,833	1,419,561	0.97%	10	199,128
Arizona	2010	2014	Mandatory	61,272	6,731,484	0.91%	9	186,003
New Mexico	2007	2014	Mandatory	12,647	2,085,572	0.61%	6	123,917
Rhode Island	2006	2014	Mandatory	6,213	1,055,173	0.59%	6	120,322
District of Columbia	2010	2014	Mandatory	2,140	658,893	0.32%	3	66,369
Nevada	2000	2014	Mandatory	8,055	2,839,099	0.28%	3	57,977
Vermont	2004	2014	Mandatory	1,583	626,562	0.25%	3	51,628
Alaska	1998	2015	Mandatory	1,418	736,732	0.19%	2	39,331
Massachusetts	2012	2015	Mandatory	12,396	6,745,408	0.18%	2	37,553
Maine	1999	2014	Voluntary	1,723	1,330,089	0.13%	1	26,471
Connecticut	2012	2014	Mandatory	2,326	3,596,677	0.06%	1	13,215
New Jersey	2010	2013	Mandatory	1,585	8,938,175	0.02%	<1	3,624
Delaware	2011	2014	Mandatory	133	935,614	0.01%	<1	2,905
Illinois	2013	2014	Mandatory	1,000	12,880,580	0.01%	<1	1,586

#### Note

Florida 2017 estimates were developed by applying the 2014 use rates to Florida's April 1, 2017 population. The rates are not age-adjusted. The estimation assumes usage rates will remain the same. These states may not be representative of Florida or the nation, so caution should be used when generalizing their usage rates to Florida.

#### Sources:

<sup>1</sup> ProCon.org, http://medicalmarijuana.procon.org/view.answers.php?questionID=001199, Last updated 7/1/2015, accessed 9/9/2015.

Alaska: Count of active cardholders. Data as of September 2015, Alaska Division of Public Health, Bureau of Vital Statistics, e-mail dated 9/16/2015

<sup>&</sup>lt;sup>2</sup> The data sources for each state are as follows:

Arizona: Count of active cardholders. Arizona Medical Marijuana Act End of Year Report 2014,

http://azdhs.gov/documents/licensing/medical-marijuana/reports/2014/arizona-medical-marijuana-end-of-year-report-

2014.pdf, accessed on 9/17/2015.

California: No mandatory patient registry, it is estimated that only a small fraction of patients register on the voluntary registry.

ProCon.org, estimates as of 10/27/2014 using Marijuana Policy Project estimates based on the ratio of patients to population

in Oregon. http://medicalmarijuana.procon.org/view.resource.php?resourceID=005889, accessed on 9/17/2015.

Colorado: Colorado Department of Public Health and Environment, 2014 (December) current patients with valid ID cards, https://www.colorado.gov/pacific/sites/default/files/CHED\_MMJ\_12\_2014\_MMR\_Report.pdf, accessed on 9/17/2015.

Connecticut: ProCon.org, ProCon.org access to the Connecticut Medical Marijuana Statistics, ct.gov, 9/9/2014 Medical Marijuana Program,

October 1, 2014, http://medicalmarijuana.procon.org/view.resource.php?resourceID=005889, accessed on 9/17/2015.

Delaware: ProCon.org, ProCon.org phone call with the Delaware Medical Marijuana Program, October 1, 2014,

http://medicalmarijuana.procon.org/view.resource.php?resourceID=005889, accessed on 9/17/2015.

DC: Count of registered patients. Government of the District of Columbia, Department of Health, Medical Marijuana Program

Update, http://doh.dc.gov/sites/default/files/dc/sites/doh/publication/attachments/MMPProgramUpdateMemo150105docx.pdf,

accessed 9/17/2015.

Hawaii: Marijuana Policy Project, Medical Marijuana Patient Numbers, estimates through 3/1/2014,

https://www.mpp.org/issues/medical-marijuana/state-by-state-medical-marijuana-laws/medical-marijuana-patient-numbers/,

accessed 9/24/2015.

Illinois: Approximate count of approval letters for patient registration. The program started accepting applications on 9/2/2014,

Patient numbers as of 2/4/2015, Illinois Department of Public Health, Illinois Medical Cannabis Pilot Program,

http://www2.illinois.gov/gov/mcpp/Pages/Updates.aspx, accessed on 9/24/2015.

Maine: Number of patients who voluntarily decided to register during calendar year 2014. Maine Department of Health and Human

Services, Medical Use of Marijuana Report, 2014, http://www.maine.gov/dhhs/dlrs/mmm/documents/2014-MMMP-Annual-

Report.pdf, accessed 9/24/2015.

Massachusetts: Count of registered and active patients. Massachusetts Department of Health and Human Services, Medical Use of Marijuana

Program, http://www.mass.gov/eohhs/gov/departments/dph/programs/hcg/medical-marijuana/, accessed on 9/18/2015.

Michigan: Count of registered and active patients. Department of Licensing and Regulatory Affairs, Medicinal Marijuana Program,

phone call 9/9/2015.

Montana: Patients with current enrollment as of December 2014,

http://dphhs.mt.gov/Portals/85/qad/documents/LicensureBureau/MarijuanaProgram/MMP%20Registry%20Info%202015.pdf,

accessed on 9/17/2015.

Nevada: Count of patients with active registration cards. Nevada Department of Health and Human Services, Division of Public and

Behavioral Health, Medical Marijuana Program, monthly reports, December 2014,

http://dpbh.nv.gov/uploadedFiles/dpbhnvgov/content/Reg/MM-Patient-Cardholder-Registry/Docs/MMP\_December\_2014.pdf,

accessed on 9/17/2015.

New Jersey: Count of registered and active patients. New Jersey Department of Health, 2013 Annual Report, Medicinal Marijuana

Program, http://www.state.nj.us/health/medicalmarijuana/documents/annual\_report.pdf, accessed on 9/17/2015 .

New Mexico: Count of registered active patients. New Mexico Department of Health, Medical Cannabis Program Statistics as of 1/2/2015,

e-mail dated September 16, 2015.

Oregon: 2015 (January) current patients with valid ID cards, Oregon Health Authority, Medical marijuana Program Statistic Snapshot,

https://public.health.oregon.gov/DiseasesConditions/ChronicDisease/MedicalMarijuanaProgram/Documents/ed-

materials/OMMP%20Statistic%20Snapshot%20-%2001-2015%20Final\_3.pdf, accessed on 9/17/2015.

Rhode Island: Count of approved qualifying patients. Biannual Medical Marijuana Report to General Assembly, December 1, 2014, http://www.health.ri.gov/publications/programreports/2015MedicalMarijuana.pdf, accessed on 9/17/2015.

Vermont: Count of registered patients. Department of Public Safety, Medical Marijuana Program, email dated 9/19/2015.

Washington: No mandatory patient registry. On 4/24/2015 a new law created a voluntary patient registry. 2014 estimates using Marijuana

Policy Project estimates based on the ratio of patients to population in Oregon.

http://medicalmarijuana.procon.org/view.resource.php?resourceID=005889, accessed on 9/17/2015.

<sup>&</sup>lt;sup>3</sup> U.S. Census Bureau, Population Division, Annual Estimates of the Population for the United States, Regions, and States: July 1, 2014, released December 2014.

<sup>&</sup>lt;sup>4</sup> Florida Demographic Estimating Conference, July 2015, population projection for April 1, 2017 was used to generate these estimates.

## II. Disease prevalence<sup>a</sup> (people alive with the disease)

Approach II uses disease prevalence rates (proportion of people alive diagnosed with a certain disease) for cancer, epilepsy, HIV, multiple sclerosis, Parkinson's, and PTSD to determine the number of eligible patients with the conditions specified in the proposed ballot initiative. There will be an **estimated 2,038,131 patients** alive in 2017 that have been diagnosed with the specified conditions during their lifetime. These patients **represent the pool of eligible patients for medical use of marijuana**. Prevalence data for the remaining conditions specified in the proposed ballot initiative were not available. In addition, there are unspecified "other debilitating conditions..." in the proposed ballot initiative which cannot be estimated under this approach.

Version II update (10/12/2015):

- Reference period updated to April 1, 2017.
- Diseases removed: Hepatitis C
- Diseases added: epilepsy and posttraumatic stress disorder
- Additional diseases for which data are now included: multiple sclerosis, Parkinson's

#### Florida Prevalence of Selected Diseases

			UPDATED
Medical Condition	2013	%	2017
Cancer <sup>1</sup>	840,263	4.41%	900,187
Epilepsy	385,191	2.00%	408,695
Hepatitis C (2002-2006)	<del>318,261</del>		
HIV	126,000		133,688
Multiple sclerosis	17,334	0.09%	18,391
Parkinson's disease	56,773	0.95%	64,471
Posttraumatic Stress Disorder	483,214	2.51%	512,699
Total specified diseases with available data	1,908,775		2,038,131

CS/CS/SB1030 REC 2014 Impact	
SB 1030 potential patient pool	1,308,882
Cancer	900,187
Seizures/epilepsy	408,695
Muscle spasms	Not available
SB 1030 with applied % of patients expected to use marijuana	15,719-187,462
Cancer	6,670
Seizures/epilepsy	3,915
Muscle spasms	5,134-176,877

#### Notes:

Estimates include cancer, epilepsy, HIV, multiple sclerosis, Parkinson's and PTSD prevalence rates. Prevalence rates for the remaining specified conditions in the petition initiative were not identified but they are expected to be relatively low.

<sup>1</sup> Estimates for cancer were developed by applying a national cancer prevalence rate to the Florida's April 1, 2012 population.

Florida 2017 estimates were developed by applying the prevalence rates to Florida's April 1, 2017 population. The rates are not age-adjusted. The estimation assumes prevalence rates will remain the same.

#### Sources:

Cancer complete prevalence 2012 data, Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov). Prevalence database: "US Estimated Complete Prevalence Counts on 1/1/2012". National Cancer Institute, DCCPS, Surveillance Research Program, Data Modeling Branch, released April 2015, based on the November 2014 SEER data submission.

Hepatitis C complete prevalence 2002-2006 data, Florida Department of Health, Hepatitis C surveillance report 2002-2006, published 2009, http://www.doh.state.fl.us/disease\_ctrl/aids/hep/5\_Year\_Report\_Jan2\_09\_FINAL.pdf

HIV prevalence as of the end of 2013, Florida Department of Health, Florida 2013 HIV/AIDS Annual report,

http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/epi-profiles/HIVAIDS-annual-morbidity-2013.pdf.

Florida Demographic Estimating Conference, July 2015, population projection for April 1, 2017.

Epilepsy prevalence: Epilepsy Foundation of Florida, efof.org, email dated 10/6/2015.

PTSD: U.S. Department of Veterans Affairs, National Center for PTSD, <a href="http://www.ptsd.va.gov/public/PTSD-overview/basics/how-common-is-ptsd.asp">http://www.ptsd.va.gov/public/PTSD-overview/basics/how-common-is-ptsd.asp</a>

<sup>&</sup>lt;sup>a</sup> Prevalence represents the proportion of people alive on a certain day who were diagnosed with the disease, regardless of how long ago the diagnosis was made; National Cancer Institute definitions; complete prevalence: <a href="http://surveillance.cancer.gov/prevalence/complete.html">http://surveillance.cancer.gov/prevalence/complete.html</a>; limited prevalence: <a href="http://surveillance.cancer.gov/prevalence/limited.html">http://surveillance.cancer.gov/prevalence/complete.html</a>; 10/12/2015

## III. Disease incidence<sup>b</sup> (newly diagnosed with the disease)

Approach III uses disease incidence rates (proportion of people newly diagnosed with a certain disease) for cancer, epilepsy, HIV, and amyotrophic lateral sclerosis (ALS) to determine the number of eligible patients with the conditions specified in the proposed ballot initiative. Disease incidence cases are a subset of disease prevalence cases, so Approach III has a smaller estimate than Approach II. There will be an estimated 130,237 patients newly diagnosed with ALS, cancer, epilepsy, or HIV in 2017 in Florida. These patients represent the pool of eligible patients for medical use of marijuana. Incidence data for the remaining conditions specified in the proposed ballot initiative were not available. In addition, there are unspecified "other debilitating conditions..." in the proposed ballot initiative which cannot be estimated under this approach.

#### Version II update (10/12/2015):

- Reference period updated to April 1, 2017.
- Diseases removed: Hepatitis C
- Diseases added: epilepsy
- No incidence data was found in the research period for posttraumatic stress disorder

## Florida New Cases with Selected Diseases (Incidence)

			UPDATED
	20	14	
Medical Condition	Number of	Percent of	2017
	New Cases	Population	
ALS (Lou Gehrig's disease)	369	0.002%	391
Cancer	107,196	0.425%	113,737
Epilepsy		0.048%	9,809
Hepatitis C	<del>220</del>		
HIV	5,938	0.031%	6,300
Total specified diseases with available data	113,503		130,237

Notes: Estimates include cancer, hepatitis C, HIV, and ALS incidence rates. Incidence rates for the remaining specified conditions in the petition initiative are not available.

Florida 2015 estimates were developed by applying the 2013 incidence rates to Florida's April 1, 2017 population. The rates are not age-adjusted. The estimation assumes incidence rates will remain the same.

#### Sources:

Florida Cancer Data System, 2012 Annual Report,

http://fcds.med.miami.edu/downloads/FloridaAnnualCancerReport/2012/Table No T1 (2012).pdf, http://fcds.med.miami.edu/downloads/FloridaAnnualCancerReport/2012/Table No T4 1 (2012).pdf

Florida Department of Health, 2013 Annual Morbidity Report, http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/data-and-publications/\_documents/2013-fl-msr.pdf.

Florida Department of Health, Florida ALS Surveillance Project.

Florida Demographic Estimating Conference, July 2015, population projection for April 1, 2017.

b Incidence: number of new cases during a given time period, <a href="http://www.cdc.gov/ophss/csels/dsepd/ss1978/lesson3/section2.html">http://www.cdc.gov/ophss/csels/dsepd/ss1978/lesson3/section2.html</a> 10/12/2015

## IV. Use rates by cancer patients

Approach IV uses medical marijuana penetration rates by disease, specifically cancer, to estimate medical marijuana users in Florida. The number of Florida cancer patients that are likely to use medical marijuana is calculated by applying the average penetration rate among cancer patients from ten other states to the Florida number of cancer patients. Assuming Florida will have the same average proportion of cancer patients in the total medical marijuana users as these ten states, the number of medical marijuana users with cancer is grown to represent total medical marijuana users with all conditions in Florida. This approach estimates that there might be **247,689 medical marijuana users** with all conditions in 2017.

## Florida Medical Marijuana User Estimates Based on Average Medical Marijuana Usage Rates among Cancer Patients across Ten States

			UPDATED
Population Categories	201	12	2017
	Estimate	Percent of Population	Estimate
Population with cancer	840,263	4.41%	900,187
Medical marijuana users	6,226		6,670
% of all medical marijuana users		2.69%	
Total medical marijuana users	183,105		247,689

#### Note:

Using counts for medical marijuana use by cancer patients and complete cancer prevalence data across the ten states in the table below, an average share of marijuana users among cancer patients was calculated. The share was applied to the Florida cancer prevalence population to estimate potential Florida marijuana users with cancer. The average share that cancer patients represent among all marijuana users from the table below was applied to the estimate of Florida marijuana users with cancer to estimate the total Florida population that may use medical marijuana. The estimation assumes usage rates and cancer prevalence rates will remain the same.

#### Sources:

100,000 Reasons: Medical Marijuana In The Big Apple, Appendix: Methodology, New York City Comptroller John C. Liu, August 2013. Cancer complete prevalence 2012 data, Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov). Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov). Prevalence database: "US Estimated Complete Prevalence Counts on 1/1/2012". National Cancer Institute, DCCPS, Surveillance Research Program, Data Modeling Branch, released April 2015, based on the November 2014 SEER data submission.

Florida Demographic Estimating Conference, July 2015, population projection for April 1, 2017.

#### Cancer Patients Using Medical Marijuana for Selected States

А	В	С	D	Е	F	G	Н
	Reference	naa Danulatian	Total Users of	Users of Medical	Cancer patients	Cancer Patients Using Marijuana	
State	Year	Population 2014	Medical Marijuana	Marijuana with Cancer		% of All Cancer Patients	% of Total Users of Medical Marijuana
Arizona	2014	6,731,484	61,272	1,666	296,534	0.56%	2.72%
Colorado	2014	5,355,866	115,467	3,870	235,936	1.64%	3.35%
Hawaii	2012	1,419,561	11,164	152	62,534	0.24%	1.36%
Michigan	2015	9,909,877	103,444	2,526	436,548	0.58%	2.44%
Montana	2014	1,023,579	10,268	674	45,090	1.49%	6.56%
Nevada	2014	2,839,099	10,119	485	125,067	0.39%	4.79%
New Jersey	2013	8,938,175	12,396	172	393,743	0.04%	1.39%
Oregon	2014	3,970,239	175,434	3,666	174,896	2.10%	2.09%
Rhode Island	2014	1,055,173	6,213	288	46,482	0.62%	4.63%
Vermont	2014	626,562	1,723	167	27,601	0.61%	9.69%
Total/ Average		41,869,615	507,500	13,666	1,844,432	0.74%	2.69%

#### Sources:

Arizona: unique conditions count, indicated cancer as the only debilitating medical condition. Arizona Medical Marijuana Act End of Year Report 2014, http://azdhs.gov/documents/licensing/medical-marijuana/reports/2014/arizona-medical-marijuana-end-of-year-report-2014.pdf, accessed on 9/17/2015.

Colorado: Medical conditions counts are not exclusive, some patients report using medical marijuana for more than one debilitating medical condition. 2014 (December) current patients with valid ID cards,

https://www.colorado.gov/pacific/sites/default/files/CHED\_MMJ\_12\_2014\_MMR\_Report.pdf, accessed on 9/17/2015."

Hawaii: The Office of Economic and Demographic Research was not able to obtain updated data for Hawaii. Data are for 2012 from the report "100,000 Reasons: Medical Marijuana In The Big Apple", Appendix: Methodology, New York City Comptroller John C. Liu, August 2013. Michigan: The number of patients is as of September 2015 but the Office of Economic and Demographic Research was not able to obtain an updated breakdown by condition as of 9/25/2015, so the number of cancer patients is for FY 2012.

Montana: Medical conditions are not exclusive, a patient may have more than one condition. Patients with current enrollment as of December 2014 and patients by condition as of July 2015, http://dphhs.mt.gov/marijuana/MMPPriorRegistryInformation, accessed on 9/17/2015.

Nevada: Medical conditions are not exclusive, a patient may have more than one condition. Nevada Department of

Health and Human Services, Division of Public and Behavioral Health, Medical Marijuana Program, monthly reports, August 2015, http://dpbh.nv.gov/uploadedFiles/dpbhnvgov/content/Reg/MM-Patient-Cardholder-Registry/dta/Monthly\_Reports/MMPAugust2015.pdf, accessed on 9/17/2015."

New Jersey: Medical conditions are not exclusive. Only terminal cancer qualifies as a condition. 2013 data. New Jersey Department of Health, 2013 Annual Report, Medicinal Marijuana Program, http://www.state.nj.us/health/medicalmarijuana/documents/annual\_report.pdf, accessed on 9/17/2015.

Oregon: Conditions are not mutually exclusive; one patient may report one or more conditions. 2015 (January) current patients with valid ID cards, Oregon Health Authority, Medical marijuana Program Statistic Snapshot,

https://public.health.oregon.gov/DiseasesConditions/ChronicDisease/MedicalMarijuanaProgram/Documents/ed-

materials/OMMP%20Statistic%20Snapshot%20-%2001-2015%20Final\_3.pdf, accessed on 9/17/2015.

Rhode Island: Medical conditions are not exclusive, a patient may have more than one condition. The total number of users is updated as of December 2014, the percentage of cancer patients is as of August 2015, Rhode Island Department of Health, e-mail dated 9/25/2015. Vermont: Count of registered patients. Department of Public Safety, Medical Marijuana Program, email dated 9/19/2015.

## V. Deaths from specified diseases (as primary cause of death)

Approach V assumes that mostly terminally ill patients will use medical marijuana. Thus, it uses 2014 death rates by disease for the specified diseases, excluding glaucoma and ALS for which no data were available, in the proposed ballot initiative to estimate the number of users. Adjusting these rates to 2017 population projections produces **47,805 potential medical marijuana patients** with the specified conditions. In addition, there are unspecified "other conditions" in the proposed ballot initiative which cannot be estimated under this approach.

Version II update (10/12/2015):

- Reference period updated to April 1, 2017.
- Diseases removed: viral hepatitis
- Diseases added: epilepsy, Parkinson's

### Florida Deaths by Selected Causes

			UPDATED
	20	14	
Primary Cause of Death	Number of	Percent of	2017
	Deaths	Population	
Cancer	42,330	0.217%	44,342
AIDS	N/A	N/A	N/A
Amyotrophic lateral sclerosis (ALS)	N/A	N/A	N/A
Crohn's disease	59	0.000%	62
Epilepsy	142	0.001%	149
Glaucoma	N/A	N/A	N/A
HIV	878	0.005%	920
Multiple sclerosis	195	0.001%	204
Parkinson's disease	2,031	0.010%	2,128
Viral Hepatitis	<del>603</del>	<del>0.003%</del>	
Total specified diseases with available data	46,238	0.237%	47,805

N/A – not available

Note: Data for hepatitis C only were not available; data for viral hepatitis were used instead.

Florida 2017 estimates were developed by applying the 2014 cause of death rates to Florida's April 1, 2017 population. The rates are not age-adjusted. The estimation assumes death rates will remain the same.

#### Sources:

Florida Department of Health, Florida Vital Statistics Annual Report 2014.

Florida Demographic Estimating Conference, July 2015, population projection for April 1, 2017.

## VI. Self-identified marijuana users from the National Health and Drug Use Survey

(This approach was used to estimate the potential number of recreational marijuana users in the fiscal impact statement for the Washington State initiative to legalize recreational marijuana)

Approach VI presents self-reported illicit marijuana use from the 2013 National Survey on Drug Use and Health. Adjusting 2013 survey results to the 2017 Florida population projections shows that there may be an estimated 1,752,277 self-reported recreational users of marijuana in Florida. If we exclude the population 18 to 24 from this estimate since they would not be as likely to suffer from the debilitating conditions envisioned in the ballot initiative as their older counterparts, it is estimated that there may be 1,168,775 self-reported recreational users of marijuana in Florida. However, this may not be a reasonable assumption since some data by age group from other states shows that the younger age groups use more medical marijuana than the older age groups.

Approach VI was included because some of the current illicit use may be for medical purposes. This estimation approach has been used by other states to estimate recreational marijuana use.

## Florida Self-Reported Illicit Marijuana Use<sup>1</sup>

			UPDATED
Age Group	Marijuana Users (% of Age Group in 2013)	2013	2017
Population 12-17	13.64%	191,678	197,610
Population 18-24	32.06%	568,965	583,502
Population 25+	8.10%	1,089,100	1,168,775
Total population 1	18+	1,658,065	1,752,277

<sup>&</sup>lt;sup>1</sup> Has used marijuana once or more times during the past year.

#### Note

Marijuana use rates for 18-25 and 26+ groups for Florida for 2013 were applied to Florida's April 1, 2013 and 2017 population estimate/projection for ages 18-24 and 25+ groups, respectively. The estimation assumes usage rates will remain the same.

#### Sources:

Substance Abuse & Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2012 and 2013, Table 2 http://www.samhsa.gov/data/sites/default/files/NSDUHsaeTotals2013/NSDUHsaeTotalsCSVs2013.zip . Florida Demographic Database, August 2015 based on results from the Florida Demographic Estimating Conference, July 2015.