

Marijuana use during pregnancy: results from Samaritan Health Services, 2016–2019

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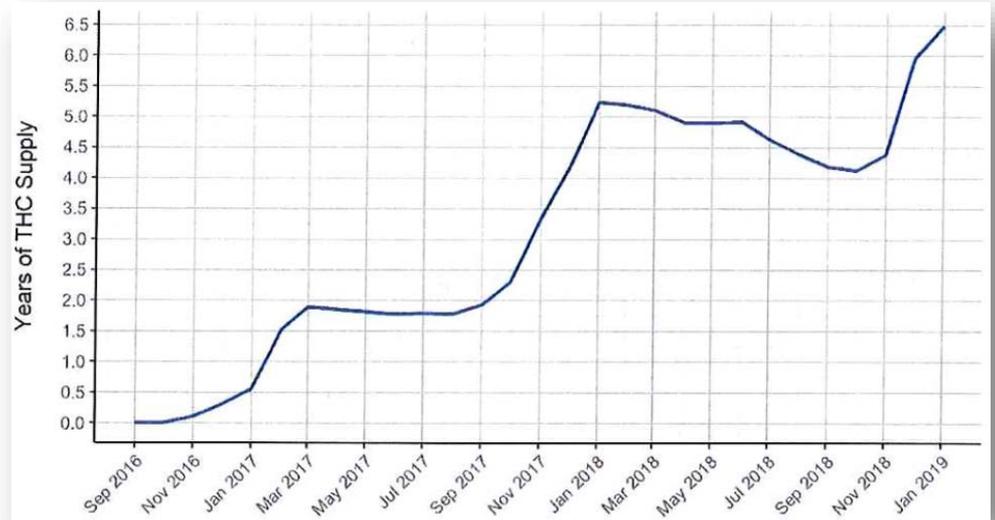
October 14, 2019



Samaritan
Health
Services

Marijuana in Oregon

- 2015:
recreational
marijuana legal
- 2017:
recreational
licensing



*Inventory of supply of THC, the active ingredient of marijuana,
by month. (Oregon Liquor Control Commission)*

<https://www.opb.org/news/article/oregon-cannabis-surplus-2019/>

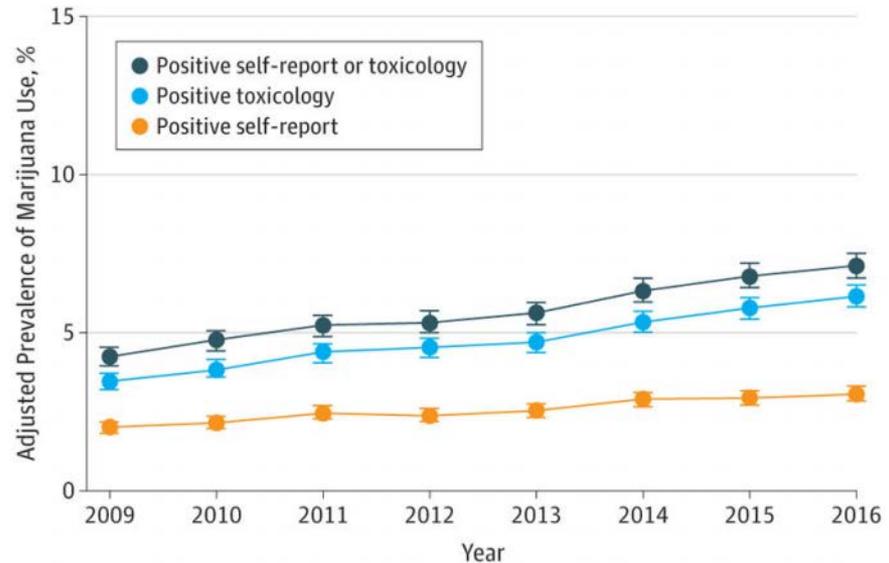
Marijuana in pregnancy

U.S. Surgeon General's Advisory: Marijuana Use and the Developing Brain

*I, Surgeon General VADM Jerome Adams, am e
Nation from the health risks of marijuana use in
increases in access to marijuana and in its pot
marijuana endanger our most precious resource, o*

KNOW THE RISKS. TAKE ACTION. PROTECT O

<https://www.hhs.gov/surgeongeneral/report/substance-misuse/advisory-on-marijuana-use>



Yong-Wolff et al. JAMA. 2017 December 26; 318(24): 2490–2491.

<https://jamanetwork.com/journals/jama/fullarticle/2667052>



Samaritan
Health
Services

Research Question

1. How has the prevalence of marijuana use during pregnancy changed since 2016?
2. Which patient characteristics are associated with marijuana use in pregnancy?

Samaritan Health Services

- Non-profit regional health system
- 5 hospitals, 80 clinics, ~200,000 patients in 2018
- Universal screening of pregnant women
 - “5P” survey
 - Urine drug screen



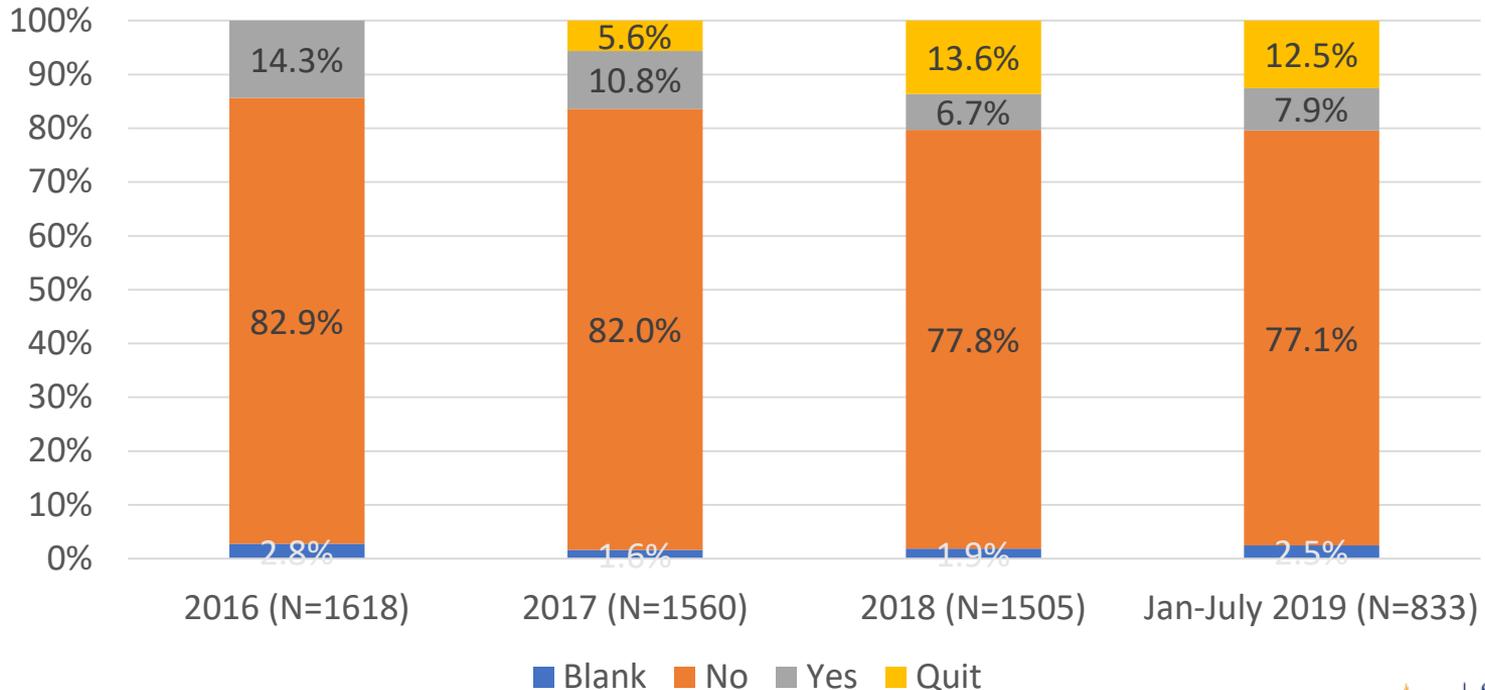
Methods

- EMR data (Epic)
- Women who delivered full-term at a Samaritan hospital between 1/1/2016 – 7/31/2019
 - All received some prenatal care at a Samaritan clinic
- Timing of testing
 - Early pregnancy: <20 weeks gestational age
 - Late pregnancy: ≥ 20 weeks to the day before delivery
 - Delivery: ± 1 day

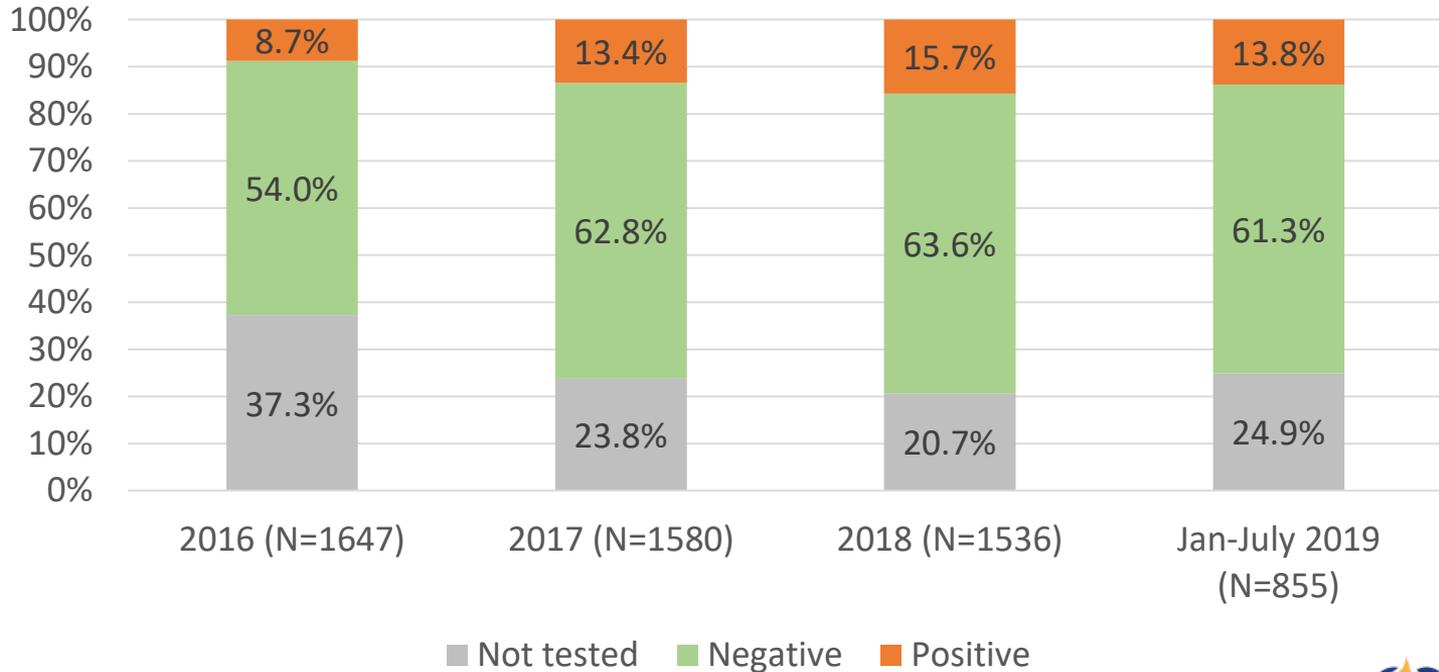
Results

- 5,657 pregnancy episodes in 5,159 women
- 5P survey: 97.5% screened (N=5,516)
 - 77.0% screened at <20 weeks
 - 71.6% screened at \geq 20 weeks
 - 27.0% screened at delivery
- Drug testing: 99.3% screened (N=5,618)
 - 72.9% screened at <20 weeks
 - 60.2% screened at \geq 20 weeks
 - 92.0% screened at delivery

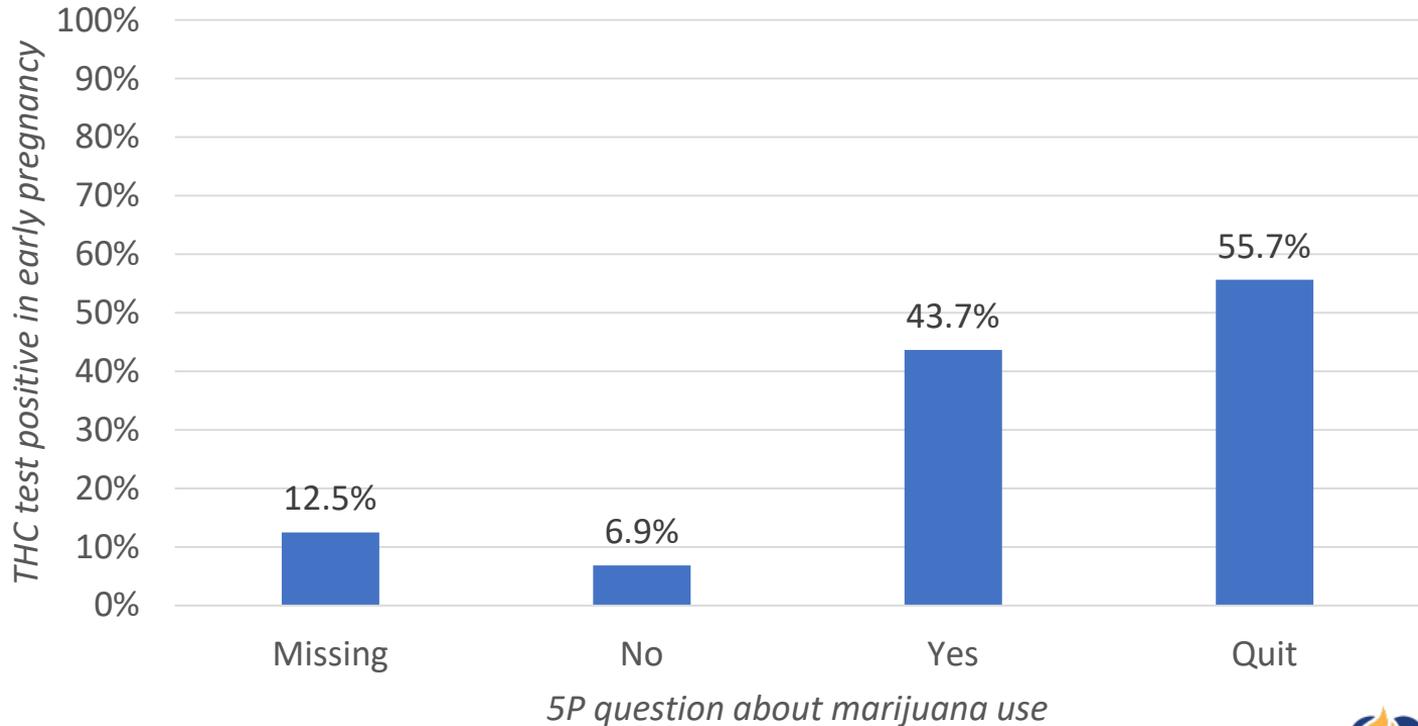
“Do you use marijuana for medical or recreational purposes?”



Urine tests for THC in early pregnancy

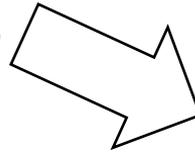
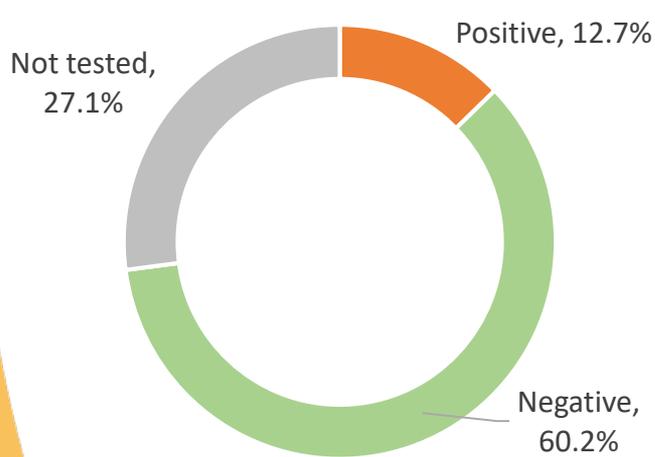


Lab results vs. self-report

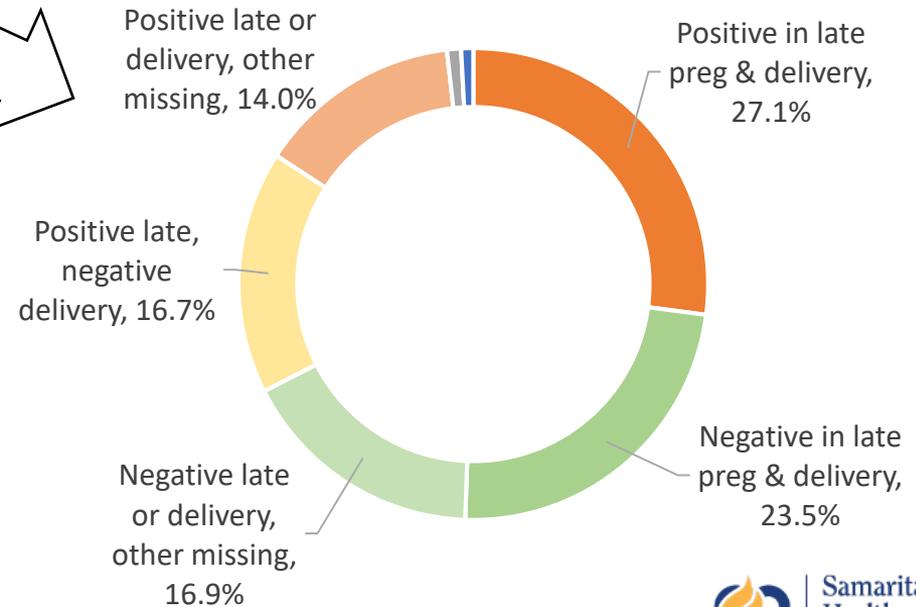


Lab results throughout pregnancy

In early pregnancy



In late pregnancy & at delivery



Logistic model: THC+ in late pregnancy or delivery

		OR	95% CI
<i>Year</i>	2016	Ref	-
	2017	1.17	0.89, 1.54
	2018	1.25	0.94, 1.66
	2019	1.11	0.80, 1.55
<i>Mom age</i>	<25	1.32	1.06, 1.65
	25-34	Ref	-
	35+	0.90	0.62, 1.31
<i>Hospital</i>	Corvallis	Ref	-
	Albany	1.36	1.01, 1.84
	Lebanon	2.18	1.56, 3.06
	Newport or Lincoln City	2.19	1.61, 2.98
<i>Insurance type</i>	Commercial	Ref	-
	Medicaid	2.48	1.95, 3.15
	Other	1.46	0.76, 2.82
<i>Report use in early pregnancy</i>	No	Ref	-
	Yes	2.46	1.78, 3.40
	Missing	1.16	0.90, 1.50
<i>Early urine screen result</i>	Negative	Ref	-
	Positive	63.71	45.09, 90.03
	Missing	12.30	8.56, 17.67
<i>Report use in late pregnancy</i>	No	Ref	-
	Yes	9.65	7.10, 13.13
	Missing	1.79	1.41, 2.27

Discussion

- No significant trend in prevalence of THC+ since 2016
- Strongest predictors of positive drug test after 20 wks GA:
 - Positive drug test in early pregnancy
 - Positive 5P survey response in late pregnancy
 - Medicaid coverage
 - Location (Lebanon/coast)
 - Maternal age <25
- Next steps: evaluate adverse outcomes in early childhood

Questions?

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