#### TREND IN ACCIDENTAL MARIJUANA INGESTION RELATED HOSPITAL VISITS BEFORE AND AFTER RECREATIONAL LEGALIZATION

Allek Scheele MD





College of Human Medicine MICHIGAN STATE UNIVERSITY

## Disclosures

• I have nothing to disclose

## Background - Timeline

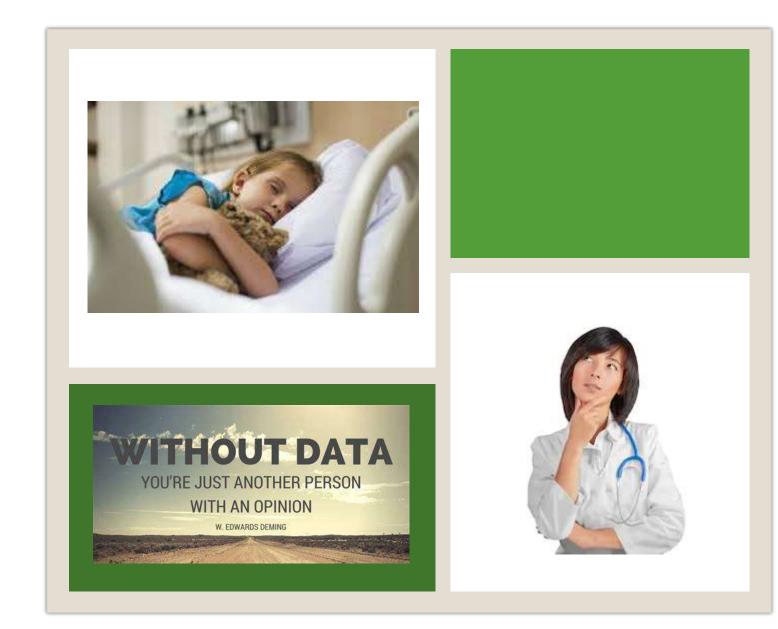


## Limits meant to help children

- Edibles cannot be sold in packages that are attractive to children or confused with non-marijuana candy brand
- Packaging must be opaque, resealable, child-resistant
- Retailer cannot be within 1000 feet of a school







ANECDOTAL INCREASE IN ACCIDENTAL INGESTIONS

## Our Study

| Investigate     |
|-----------------|
| Investigate     |
| incidence of    |
| THC exposure    |
| in years        |
| leading up to   |
| legalization to |
| a year after    |

Aim

#### Large tertiary care hospital

Our Center

•9,000 admissions

- annually55,000 ED visits annually
- Retrospective chart review
  4 years prior to legalization to one year after
  Medical record report generated total number of admissions and ED visits

Design

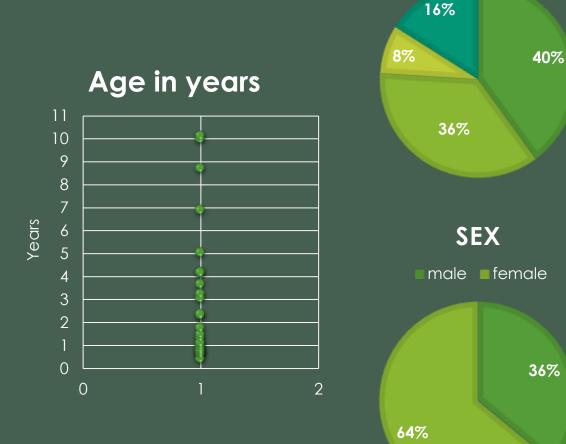


## Our Study

| Aim   | Our Center   | Design  | Data Collected  | Statistics   |
|---|--|---|---|--|
| <ul> <li>Investigate<br/>incidence of<br/>THC exposure<br/>in years<br/>leading up to<br/>legalization to<br/>a year after</li> </ul> | <ul> <li>Large tertiary<br/>care hospital</li> <li>9,000<br/>admissions<br/>annually</li> <li>55,000 ED visits<br/>annually</li> </ul> | <ul> <li>Retrospective<br/>chart review</li> <li>4 years prior<br/>to legalization<br/>to one year<br/>after</li> <li>Medical<br/>record report<br/>generated<br/>total number<br/>of admissions<br/>and ED visits</li> </ul> | <ul> <li>Urine Drug<br/>screen results</li> <li>Sex</li> <li>Race</li> <li>To which unit<br/>they where<br/>admitted</li> <li>If social work<br/>was<br/>consulted</li> <li>Associated<br/>Diagnoses<br/>codes</li> </ul> | <ul> <li>Rates of THC positive patients</li> <li>Test of population proportions</li> </ul> |

## Results - Demographics

- Total 25 patients
  - 12 admitted to inpatient unit
    - 9 general pediatrics
    - 3 PICU
  - 13 ED only encounter
- Age range 5mos to 10 years
  - Avg 3 yrs
  - Median 1yrs 9mos



#### RACE

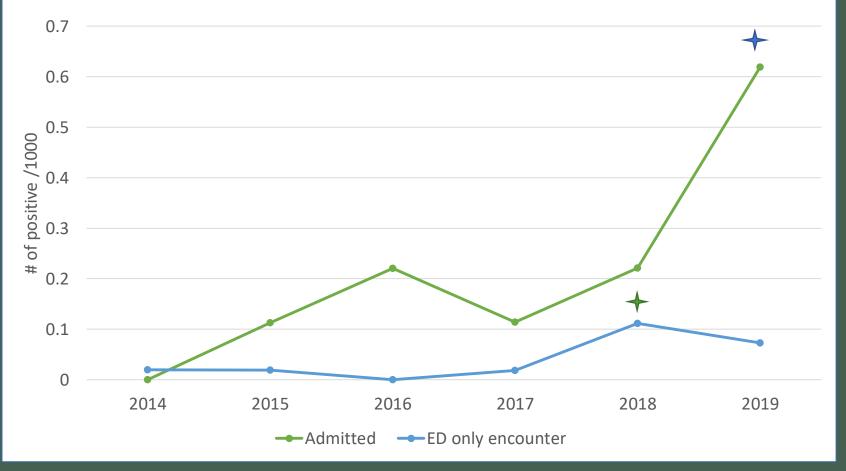
hispanic

White Black multiracial

## Results

- Numbers where low prelegalization
- The rate overall increased the year that legalization passed
- Proportion of hospitalized children tripled the first full year of legalization
- Year to year changes approach stat significance
- Stars mark significant changes compared to 2017

## Number of UDS positive for THC in patients <12yo per 1000 total encounters





## Future Work

- Continue to Collect data through first year of retail availability
- Expand data to Comprehensive drug screens
- Advocacy

## Acknowledgments

- Andrea Hadley, MD
- Valerie Chen, MS4
- Cara Polland, MD
- Peds Hospital Medicine Fellowship









College of Human Medicine MICHIGAN STATE UNIVERSITY

# THANK YOU!

Allek.Scheele@spectrumhealth.org