#### MARIJUANA (THC) LEGALIZATION

#### A DISCUSSION OF THE PUBLIC HEALTH ISSUES

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September, 2019



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- An important note
  - The information I am presenting is from my own reading of the literature I have accessed and the opinions and conclusions expressed are my own
  - Neither the Tompkins County Health Department nor the Board of Health have taken a position regarding the legalization of marijuana



## • What is it? • How does THC fit in?

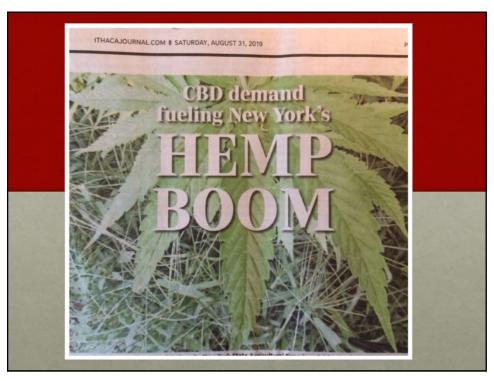
#### SOME BASICS

- THC (tetrahydrocannabinol) the principle psychoactive cannabinoid of marijuana
- CBD (cannabidiol) is the chemical in marijuana that is thought to have medicinal properties
  - We will touch briefly on CBD

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#### CBD

- NYS law allows the dispensing of "medical marijuana"
  - (actually CBD used for medical purposes)
- Federal law moved CBD out of Schedule 1 of controlled substances



#### CBD ISSUES

- Medical indications
- Routes of use

#### *INDICATIONS*

- Only 3 indications with good data to support them
  - Chronic pain
     Muscle spasms due to multiple sclerosis
     Nausea of chemotherapy

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## INDICATIONS WITH LESS SUPPORT

• From Anxiety to schizophrenia

#### ROUTES OF DOSING

- Oral
  - · Liquid, solid
- NYS prohibits smokable and vapable forms for medical CBD

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# • Is Linked to • COPD Cancer Asthma / Bronchospasm Chronic bronchitis

#### VAPING

- Linked to:
  - Airway obstruction
  - Deaths
    - currently being epidemiologically investigated

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#### THC

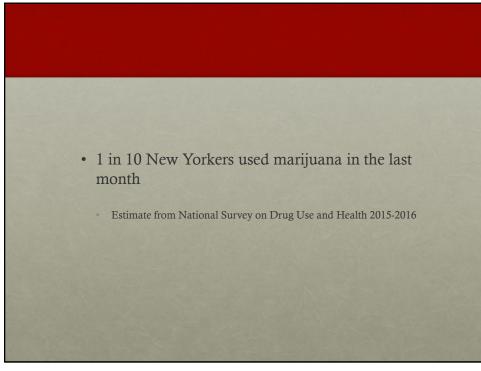
- Because THC has been and can be made extremely concentrated it has become a greater concern
- It is not marijuana anymore not like we have thought of it in the past
- If we can, we should stop talking about marijuana or cannabis and instead speak of THC

#### A FAIT ACCOMPLI

- The pervasiveness of THC in our state significantly alters the discussion we are having
  - The question before us is how to intelligently approach a substance that is already widespread in a setting wherein our past treatment of it has had unfortunate outcomes

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- 52% of Americans 18 years or older have tried marijuana at some point
  - 44% of them currently use it
    - (Marist poll 2017)



• 80-90% of 18 year olds have consistently reported that marijuana is "very easy" or "fairly easy" to obtain since the 1970s

NYSDOH, Assessment of the Potential Impact of Regulated Marijuana in New York State, July 2018

#### THC RISKS

- Impairment of cognition
  - Learning, memory, and attention

Harmful to lungs if smoked and we know vaping has health issues

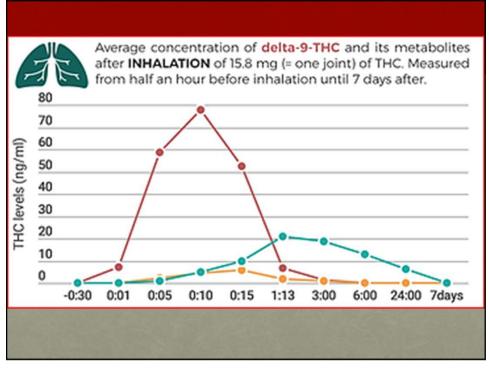
Use in Pregnancy
lower birth weight
more likely to need intensive care after birth

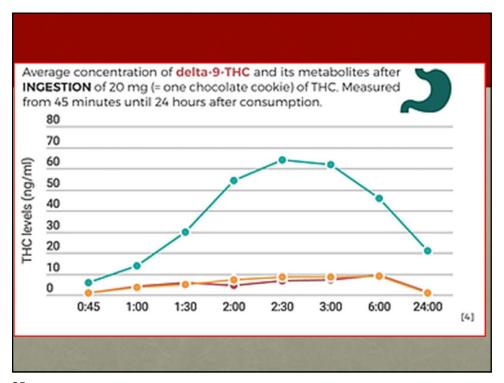
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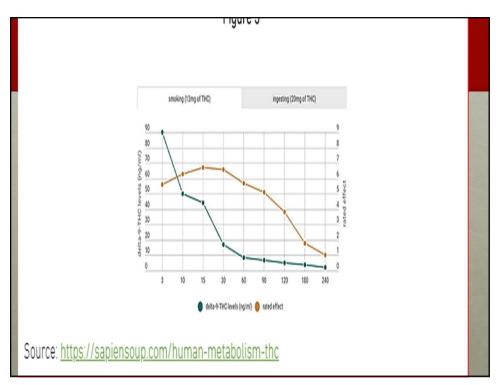
#### THC RISKS CONTINUED

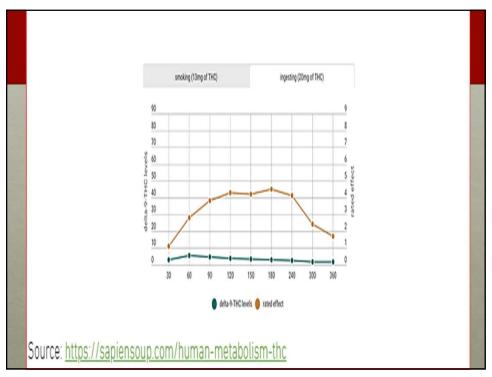
- Psychosis especially in susceptible people
- individuals with serious mental illness use THC at higher rates and if continue use worse outcomes and functioning
- Dependency (lack of consensus estimates range from 9 to 30%)
- Acute overdose syndromes and deaths

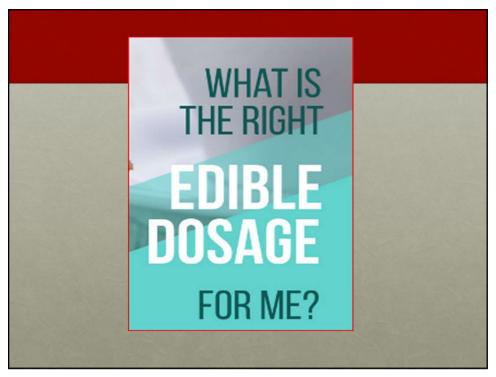








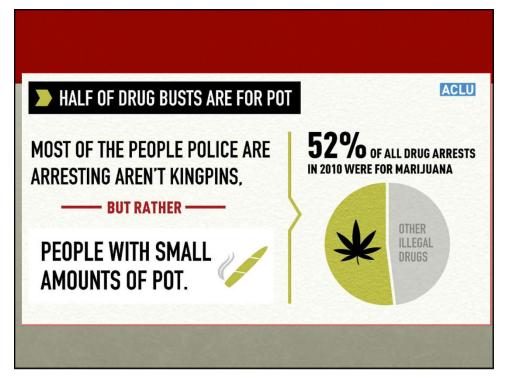


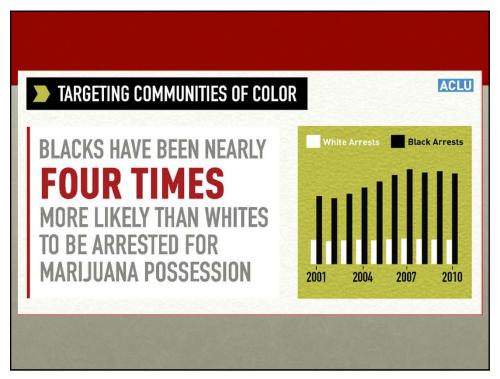


### THC RISKS – ARREST AND INCARCERATION

- Disproportionate criminalization and incarceration of certain racial and ethnic groups has had a negative impact on persons, families and communities
  - And has not curbed marijuana use
  - NYSDOH, Assessment of the Potential Impact of Regulated Marijuana in New York State, July 2018

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#### TRAFFIC SAFETY

- An important concern
  - THC is different from alcohol
    - In detection and determination of impairment
    - Studies of traffic accidents and fatalities are particularly tricky to conduct
      - One of the difficulties is the pervasiveness of THC regardless of legalization

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Early Evidence on Recreational Marijuana Legalization and Traffic Fatalities,

Hansen et al, University of Oregon Feb 2018

#### OTHER LAW ENFORCEMENT CONCERNS

• Losing marijuana as an arrestable offense will remove one of the tools law enforcement has used to provide "cause" to look for other offenses

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## FINALLY - IS THC A GATEWAY DRUG?

"...the majority of people who use marijuana do not go on to use other, "harder" substances. Also, cross-sensitization is not unique to marijuana. Alcohol and nicotine also prime the brain for a heightened response to other drugs and are, like marijuana, also typically used before a person progresses to other, more harmful substances."

National Institute on Drug Abuse, *Is Marijuana a gateway drug?* www.druggabuse.bov/publications/research-reports/mrijuana/marijuana-gateway-drug, accessed 9/25/2018

### LEGALIZATION AND REGULATION IMPACTS

- Youth have less easy access
- Less chance THC product may be adulterated\*
- Marketing more controlled
- Dosing of THC more regulated
- Public education messaging funded
- Social costs such as Arrest/incarceration reduced

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\*other drugs, herbicides, insecticides, chemicals

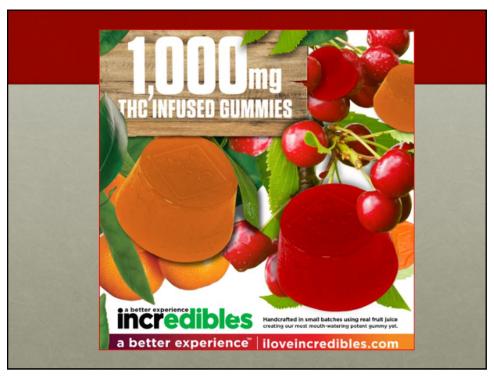
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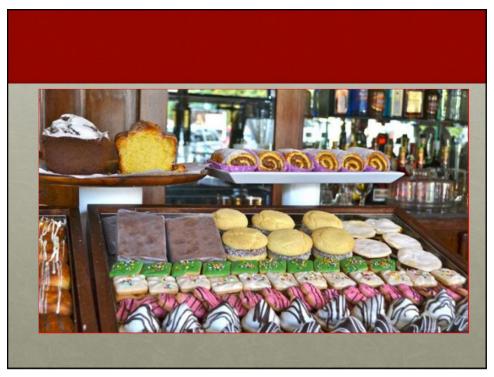
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- Packaging of product regulated
- Risks of inhalation/vaping mitigated
- Corporate control of the market subject to regulation











- Packaging of product unregulated
- Portion size regulated
- Risks of inhalation/vaping mitigated
- Corporate control of the market subject to regulation

- Packaging of product regulated
- Risks of inhalation/vaping mitigated via education, regulation of product labeling
- Corporate control of the market subject to regulation

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#### LEGALIZATION

- Folds THC into the same agency and structure we use for alcohol
   Sets the age of purchase at 21
- Amends public health, vehicle and traffic, penal and

criminal law amongst others

• Sets regulatory framework for the growing, wholesale and retail sales of THC

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- Sets up a process of citizen input to the all important creations of rules and regulations
  - Public hearings, and written comment
  - Expert testimony
  - Determines the actual operation of the law

If the legislature legalizes marijuana
(THC) participation in the rule and
regulation making process will be key to
achieving the benefits of THC.

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Expenses incurred by the many state and local agencies involved will need to be meaningfully recognized by NYS

