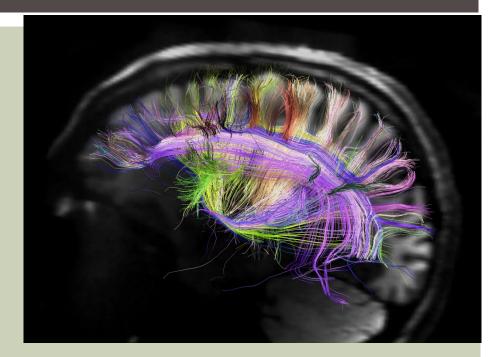
# KIDS IN THE CANDY STORE

MICHAEL NERNEY AND ASSOCIATES P.O. BOX 93 LONG LAKE, NY 12847-0093 518-624-5351 MICHAELFNERNEY@GMAIL.COM Intoxicants in the Home

### THE ADOLESCENT BRAIN FACTOR

#### Emotional Intensity

- Ages 11 24 years
- Amygdala
  - Hormones
  - Larger and more active
- 2 to 4 times

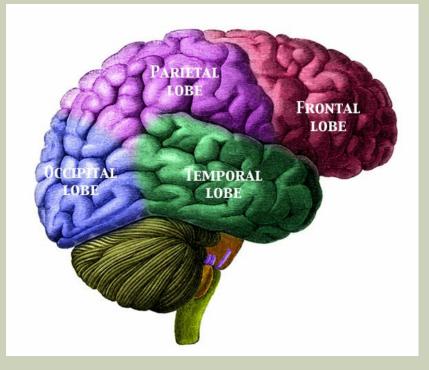


https://images.nonexiste.net/popular/2012/03/30/diffusion-spectrum-imaging-reveals-an-orderly-weave-of-nerve-fibers-in-the-brain/

### THE ADOLESCENT BRAIN FACTOR, CON'T.

#### Risk Taking and Peers

- Change at 13 years old
- New sites appear in brain
- Emotional reward for risk taking
- Peer influence

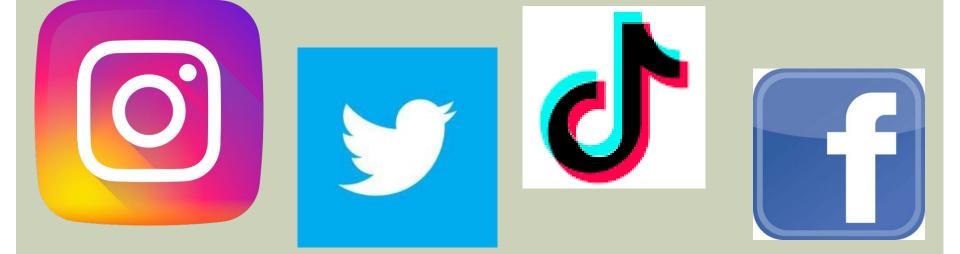


## BRAIN FACTOR, CON'T.

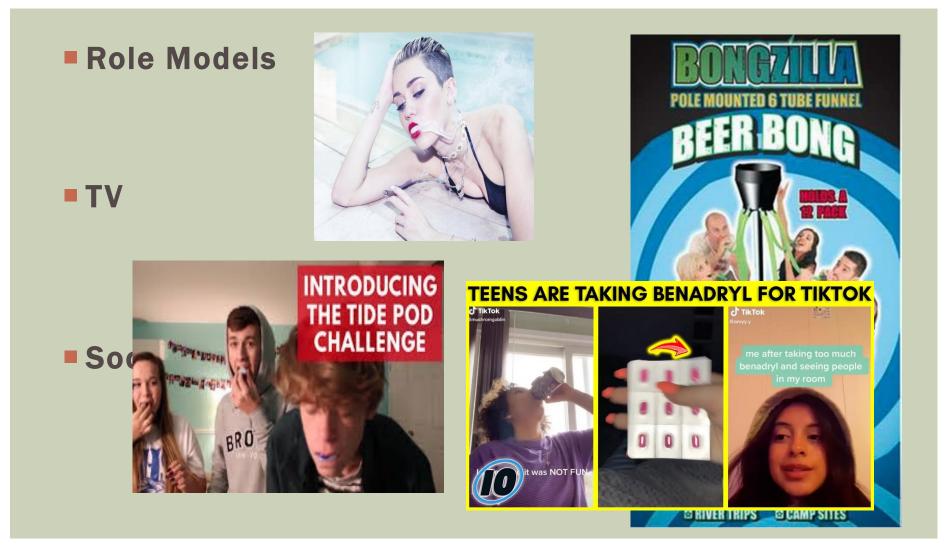
#### Social Media

- YouTube, TikTok, Instagram, Snapchat, Twitter, WhatsApp
- Instant information
- Personal communication
- Possibly anonymous
- Nearly every young person has access





## CULTURAL AND ENVIRONMENTAL INFLUENCES



### **RISK TAKING**

#### Kylie Jenner Challenge

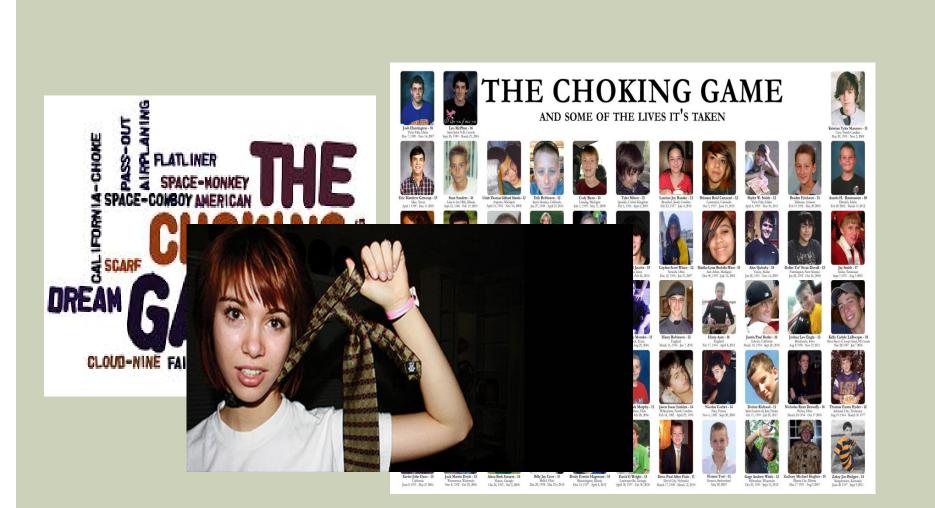








#### **RISK TAKING**



#### SOURCES

Your House/Grandma's House

A Friend's Home

The School

The Neighborhood

The Internet



#### **HIDDEN TREASURES**

#### Common articles for hiding drugs



### PATTERNS

#### As Needed

Medication for Feelings

• 4 out of 10

Negative Emotions



### PATTERNS

#### Recreation

Disinhibition

Anxiety Reduction

Euphoria

### PATTERNS

#### Cross-generational

- Other Siblings' Medications
- Parents Medical/Recreational
- Kids use grandparents'
- drugs and products



#### Enhance Primary Drug Effect

Boost the initial drug

Slow metabolism

Grapefruit juice



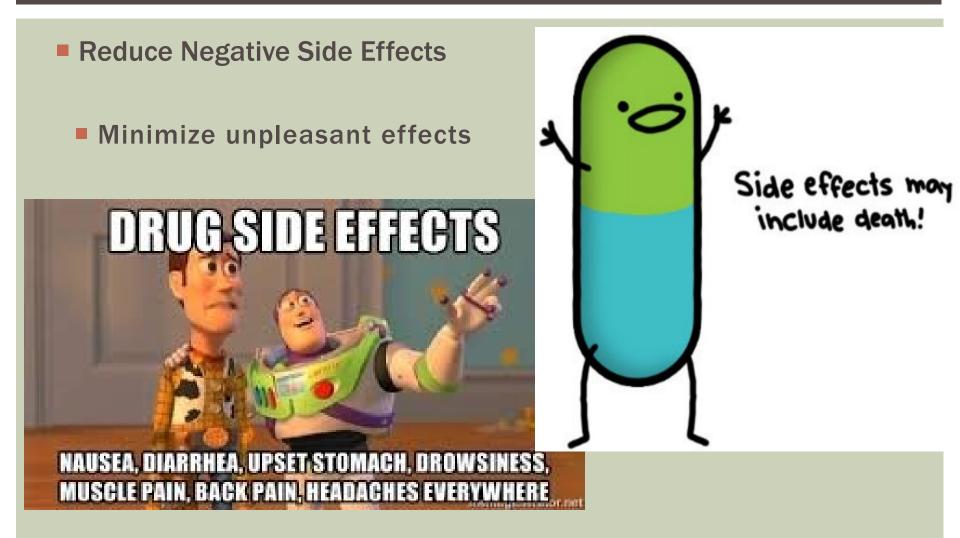
#### Alleviate Withdrawal

Mask the withdrawal symptoms

Two separate systems

One system suppression





#### Dewshine





## ALCOHOL AND CAFFEINE

#### Impact on Brain

- Two systems activated
  - Stimulatory caffeine
  - Biphasic alcohol
- Harvard University study
  - "Wide Awake Drunk"



## ALCOHOL AND CAFFEINE: RISK FACTORS

#### Physical

- Energized
- Uncoordinated
- 30% drop in glucose uptake in motor cortex
- 30% drop in glucose uptake in visual cortex
- Slower reaction time



## ALCOHOL AND CAFFEINE: RISK FACTORS, CONT.

#### Behavioral

- Sense of competence
- Aggressive social interactions
- Twice as likely to suffer physical injury
- Twice as likely to get in fights
- Twice as likely to be either a victim or a perpetrator of sexual assault

## ALCOHOL AND CAFFEINE: RISK FACTORS

#### High risk when operating any moving vehicle

- Auto/motorcycle
  - 32% of all crashes alcohol-related
- Boat
  - 60% of fatalities alcohol-related
- Bike/skateboard
- High risk:
  - Swimming
  - Heights
  - Parties









## ALCOHOL: COMBINATIONS

#### Robo-shots

- Dextromethorphan
- Opioid cough suppressant
- Plus alcohol
- Rapid and powerful intoxication
- Motor control
- Impulse control
- Delusional





## ALCOHOL: OTHER PRODUCTS

#### Hand Sanitizer

**68-72%** 

Mouthwash



- As much as 27% Alcohol
- Can be purchased with zero alcohol

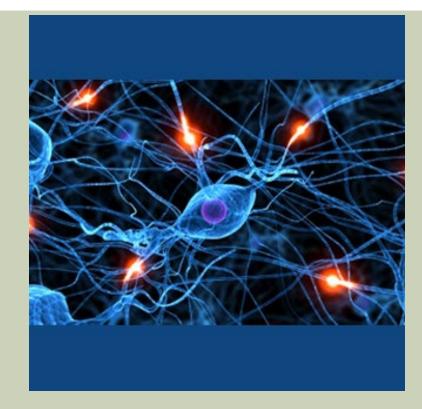
Vanilla Extract 35% Alcohol





## **ALCOHOL STUDIES**

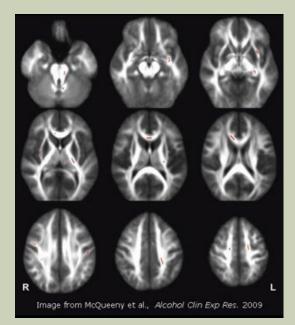
- Duke Study
- 23+ NMDA
- Calms and sedates
- **23-** NMDA
- Stimulates and excites
- Calcium override



## ALCOHOL: IMPACT ON ADOLESCENT BRAIN, CONT.

#### NMDA pathways

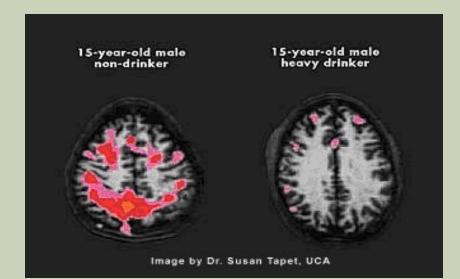
- 48 hours calcium overrun
- Cell death
- One year of binge drinking
   10% loss of PFC volume
  - Logic, reason, executive function



### ALCOHOL

#### 10% Loss of Volume in Hippocampus

- Memory
- Motivation
- Social Behaviors



### ALCOHOL: SOCIAL BEHAVIORS

- Heavy drinkers in adolescence:
  - 7 times more likely to have multiple sexual partners
  - 6 times more likely to cut class in college; skip school in middle and high school
  - 4 times more likely to engage in vandalism and theft
  - 3 times more likely to get in fights
  - 3 times more likely to be self-injurious

## ALCOHOL: THE COSTS

- Thirteen teens die each day in the US
- 600,000 HS and college students injured per year
- 70,000 alcohol-involved sexual assaults per year
- Drop outs/Flunk outs
- Unwanted pregnancies
- Addiction potential

#### ALCOHOL AND PAIN PILLS

Rx Meds

Opioids









## **ON THE HORIZON**

#### Other Opioids

- Zohydro Rx pain
- Codeine Rx pain and cough
- Imodium OTC
- Gabapentin and Lyrica nerve pathway

## **NEW PRODUCTS**



#### **NEW PRODUCTS: DABBING**

#### Butane Hash Oil

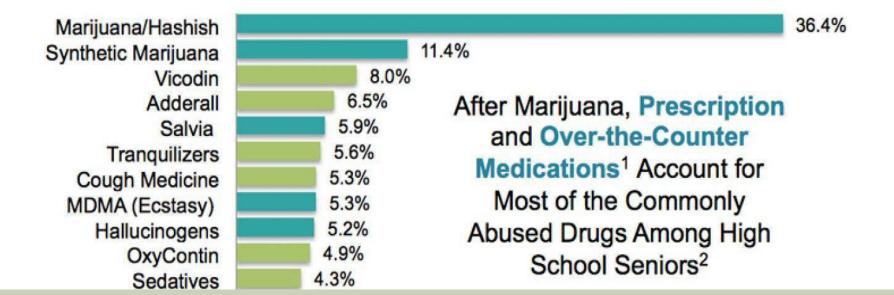
Amber, Shatter, Ear Wax







### **RX AND OVER THE COUNTER**



## OVER THE COUNTER DRUGS

#### **A**vailability



Photo source: www.fdalawyeisblog.com

Many over-the-counter (OTC) and prescription drugs are readily available.







- Allergy Medications
- Cough suppressants

Depressant plus alcohol

- Antihistamines
- DecongestantsStimulatory

Acetaminophen often added



#### UNDER THE SINK/IN THE GARAGE

## Inhalants



- Chemical fumes /nitrous oxide
- Found in products such as Reddi-wip, Dust Off and other aerosols. Metalic spray paints are preferred.
- Inhaling from a paper or plastic bag "bagging", and huffing (inhaling) from a soaked rag.
- Causes hypoxia, can result in death from the very first use

## SOLVENTS/PROPELLANTS

#### Solvents

- Cleaners for computer keyboards
- Vegetable oil spray
- Spray paint
- Whipped cream cans (also referred to as whip-its or whippets)
- Hair sprays
- Spray deodorant
- Canned air fresheners
- Fabric protector spray
- Nail polish and NP remover
- Brain Damage, organ damage and SSD

## **VOLATILE GASES**

#### Hydrocarbons

#### Gasoline, Butane, Propane







## FROM THE KITCHEN

- Nutmeg/Mace
  - Long lasting
  - Side effects
  - Hallucinogenic



#### **SPECIAL CIRCUMSTANCES**

#### A Day at the Beach

- Spring, Summer, and Fall
- Open water drownings
- Male / Female



## SOCIAL MEDIA / RISK TAKING

GoPro/YouTube

High T + H2O = 1+1+1+1+1+1+1+1 = DD

```
ETOH + T + H2O = 50%
E + H2O = 1
```

**Open water 3x** 



### WHAT TO DO

Online Research Yours and Theirs

## Know your Medications Check numbers and levels

Same with Alcohol and household products

### PAY ATTENTION TO INTUITION

- Keep the lines open
- What are your beliefs?
- Watch for changes
- Denial is not just a river in Egypt
- Ask for Help