#### Underage drinking: The Emergency Department Perspective



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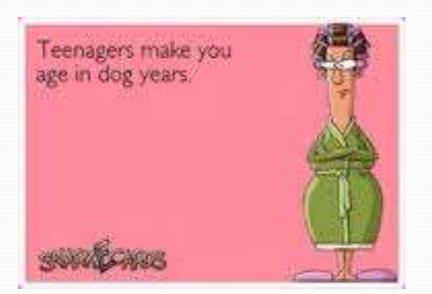
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Welcome to being a parent of a teenager. Prepare for a large amount of eye rolling, emotional outbursts, & thoughts of running away. And that's just the parents.

someecards



Why to teenagers do dumb things?



- Understanding the changing teenage brain, may help us understand a puzzling contradiction
- Teens are are at the peak of physical health, strength and mental capacity...yet this is a hazardous age.
- Mortality rates of death from injury in the 15-19 age group are 6 times higher than in the 10-14 age group.













- Genes, childhood experiences, and the environment in which a young person reaches adolescence all shape behavior.
- Research is revealing how all these factors act in the context of a brain that is changing, with it's own impact on behavior.

## National Institute of Mental Health



- The parts of the brain that are responsible for "topdown" control, controlling impulses, and planning ahead – the hallmarks of adult behavior – are among the last to mature. This part of the brain may not mature until the early 20's.
- Reproductive hormones shape not only sex-related growth and behavior, but overall social behavior.
- Hormone systems involved in the brain's response to stress are also changing and also affect teen behavior.

#### Some recent research:

#### Are teenagers drawn to risk?

- Some research has shown that teens tend to wildly overestimate certain risks (unprotected sex and drug use) not lowball them as some predict.
- If risks are known, however, adolescents engage in risk taking less than adults do, but if the risk is unknown, this is reversed.



- ...but this overestimation of risk does not prevent them from engaging in risky behavior. Why?
- Teenagers enter unsafe situations not because they are drawn to risky situations, but rather because they aren't informed enough about the odds of the consequence of their actions, their brains are highly sensitive to rewards, and they have little impulse control.

The reward may outweigh the potential/unknown risks.

## So... now let's talk about teens and alcohol use

- Do teens drink? Yes
- According to the NIH in 2009:
  - 10.4 million between the ages of 12 and 20 drank "at least a few sips of alcohol"
  - By age 15: 50% of teens report drinking at least one alcoholic drink
  - By age 18: 70% of teens have had a least one drink



CDC 2011 Youth Risk Behavior Study – High School Students

- In the last 30 days:
  - 39% drank some amount of alcohol
  - 22% binge drank
  - 8% drove after drinking alcohol
  - 24% rode with a driver who had been drinking alcohol



### Do Manhasset teens drink?

- Yes
- According to the 2013 Bach Harrison Survey
  - 69% 12th Graders report drinking in last 30 days
    - 54% 12<sup>th</sup> graders binge drinking
  - 39% 10th Graders report drinking in last 30 days
    - 23 % 10<sup>th</sup> graders binge drinking



## Why do they drink?

- To fit in a community or group
- To escape or relax
- To feel grown up among their peers
- To relieve boredom and give them personal excitement
- To rebel and get violent without fear
- To experiment (curiosity)
- Peer pressure
- ... but they don't understand the risks





## How does teenage drinking differ from adult drinking?

- Teens drink less often than adults
- But drink much more at once when the do drink
  - BINGE drinking: more than five drinks in one setting
- Teenagers between the ages of 12-20 drink 11% of the all the alcohol consumed in the US
  - Teenagers drink 90% of the alcohol they consume by binge drinking





## Is there a binge drinking gene???



- Alcohol and other addictive drugs activate the brain's dopamine systems, which induces feelings of pleasure and reward.
- Scientist have performed several studies suggesting that people with a genetic variation may release more dopamine when anticipating a reward, and hence derive more pleasure from it.
- So if the brain is wired to find alcohol rewarding and it makes them happy they will seek it out at higher levels despite consequences.

#### **Consequences of teen drinking**

- School, social, legal, and physical problems
- Unwanted, unplanned, and unprotected sex
- Disruption of normal growth and sexual development
- Physical and sexual assaults
- High risk for suicide and homicide
- Car accidents and other accidents (falls, drowning)



- Memory problems/changes in brain development
- Abuse of other drugs



- Risk of youth experiencing these problems is greater for those who binge drink than for those who do not binge drink.
- Youth who start drinking before age 15 are five times more likely to develop alcohol dependence or abuse later in life when compared to those who begin drinking after the age of 21.



## Some scary Facts

- Every year in the United States, about 5,000 young people under age 21 die as a result of underage drinking.
  - » 1,900 deaths from motor vehicle crashes
  - » 1,600 from homicides
  - » 1,200 from alcohol poisoning, falls, burns, and drowning
  - » 300 from suicides





## Emergency Department visits related to underage drinking:

• In 2008 about **190,000** people under the age of 21 visited US emergency departments for alcohol related illnesses/injuries



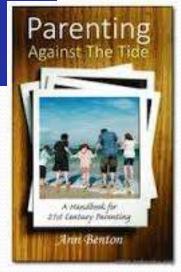


## Emergency Department visits related to Manhasset Youth:



On average, two Manhasset youth (between the ages of 12-21) visit the emergency room (treat & release) each month for issues relating to alcohol, marijuana or prescription drug misuse. Please pass me that parenting handbook.

I need to smack my kid with it.



## What to do if your child (or someone else's child) or a friend is intoxicated:

- If the teen is intoxicated to the degree that they are not easily arousable they may not be able to protect their airway.
- If they should vomit they are at risk for aspiration of the vomitus into their lungs. This may cause them to have low oxygen levels and even lead to their inability to breath.





#### Good Samaritan 911 Law



"A person who, in good faith, seeks health care for someone who is experiencing a drug or alcohol overdose or other life-threatening medical emergency shall not be charged or prosecuted for a controlled substance offense."

#### Good Samaritan 911 Law

We should let our teens know that if they are drinking or consuming other illegal drugs with their friends and someone is in trouble and having a medical emergency they should never hesitate to call 911.

They may save a life.



## The ER

## Some things you should know...

- Primary goal: your child's safety.
- We don't judge.
- We are glad you took the steps necessary to ensure your child's safety.
- We don't gossip.





## Things we worry about:

- Co-ingestion
  - May increase the affect of alcohol
  - Can lead to respiratory failure
  - Benzodiazapines, opiates, "club drugs"
- Injury
- Sexual assault
- Depression/Anxiety
- Suicide attempt



#### Can a teen die from over drinking?

#### • Yes

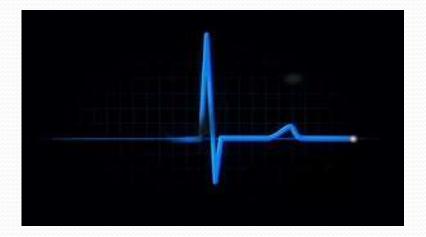
- Respiratory failure
  - More likely with co-ingestion
- Aspiration
- Trauma
  - Fall from a height
  - Hit by car
- Motor vehicle accident
- Drowning



#### **Emergency department**

#### Management

- Stabilization of the ABC's
  - Airway
  - Breathing
  - Circulation
- Intravenous fluids and blood work
  - Fluids for hydration
  - Lab work for electrolytes, blood gas, alcohol level, and screen for co-ingestions



### Antidotes

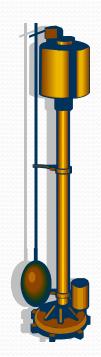
- There is no specific antidote for alcohol
- If possibility of opiate ingestion
  - Narcan
- Hemodialysis
  - Rarely used
  - Only for extreme intoxication
  - Underlying liver disease



### **GI** Decontamination

WHAT ABOUT "PUMPING THE STOMACH"?

- Alcohol rapidly absorbed into blood stream
- Risk for vomiting and aspiration
- Bottom line
  - Doesn't work
  - May cause harm



#### **Disposition from the ER**

- Admission versus discharge home
  - Admission may be considered if
    - Level of intoxication is extreme and there is a change in mental status
    - Concern for a dangerous co-ingestion
    - Abnormal blood work or xray/ct scan that shows an injury
    - Concern for self harm
    - Inability to be reliably watched at home



## Legal ramifications

 "There going to drink anyway, better they should do it at here"



#### Some information for parents

- Parents who serve alcohol to their children in their home should know that they may ONLY serve their children.
- However, if you give your own child too much alcohol, causing intoxication, it can bring up issues surrounding child endangerment.



#### The Social Host

The Social Host Laws in Nassau County place criminal and civil liability (large fines and up to a year in jail) on parents who allow underage drinking in their homes, even if they didn't supply the alcohol, even if other parents gave them permission.



#### Nassau County Social Host Laws

 No one wants to be arrested in front of all their neighbors.



#### LIABILITY

• Aside from being liable for any injury or damage that occurs from underage drinking , parents could face up to a year jail and a \$1000 fine.





#### Underage Drinking and Driving



### NY's ZERO TOLERANCE LAW

- NY has zero tolerance for underage drinkers who get behind a wheel with a blood alcohol content (BAC) of .02% or higher.
- If your teen refuses the Breathalyzer test, his/her license is immediately, automatically revoked for one year.



#### If your teen is convicted....

If you are not dropped, parents' insurance rates will be adversely affected by their DWAI/DWI offspring. Rates can increase as much as 500%. That "one little drink" by your teen could cost you thousands.



### So what can we do?

Strongest approach for preventing underage drinking involves the coordinated effort of all the elements that influence a child's life:

- Family
- Schools
- Community



Manhasset CASA ...since 2001!

Programs that showed some promise: Project Northland

# How parent's can help



- Be a good role model.
- Be involved in your teen's lives. Our own lives are always really busy, so we need to schedule the time.
- Make it easy for teens to share information about their lives.
- Know where and with who your teens are.
- Help them find ways to have fun without alcohol.
- Be open with them about dangerous situations.
- Help them get professional help if they need it.

## Join Manhasset CASA & attend meetings & programs

### It's a Fact...Parents Do Matter

### If you would like to contact me or Dr. Amato

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