



National Institute
on Alcohol Abuse
and Alcoholism

UNDERAGE DRINKING

Introduction to the Scope and Nature of the Problem

ICCPUD Webinar Series – Webinar I

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Alcohol is the drug of choice among youth.

Many young people drink alcohol ...

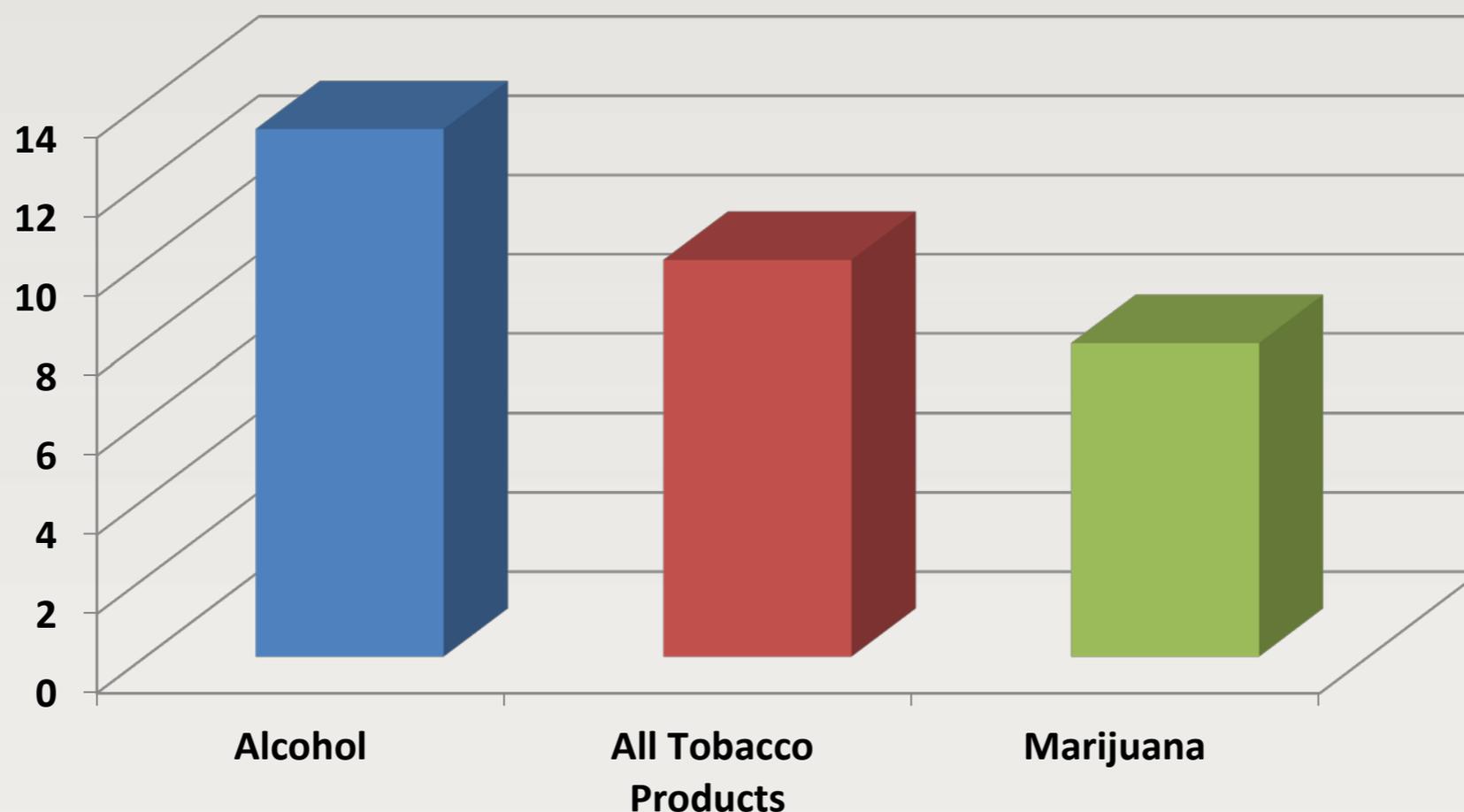
- **By the 8th grade, 3 in 10 teens have had at least 1 drink.¹**
- **By the 10th grade, more than half of teens have had a drink.¹**
- **By the 12th grade, 7 in 10 teens have had a drink.**
- **In 2011, 9.7 million young people ages 12–20 reported that they drank alcohol beyond “just a few sips” in the past month.²**

¹ Monitoring the Future, 2012

² National Survey on Drug Use and Health (NSDUH), 2011

More young people use alcohol than use tobacco or marijuana (or any other illicit drug).

Percentage of Youths Ages 12–17 Using Alcohol, Tobacco, and Marijuana (NSDUH, 2011)*



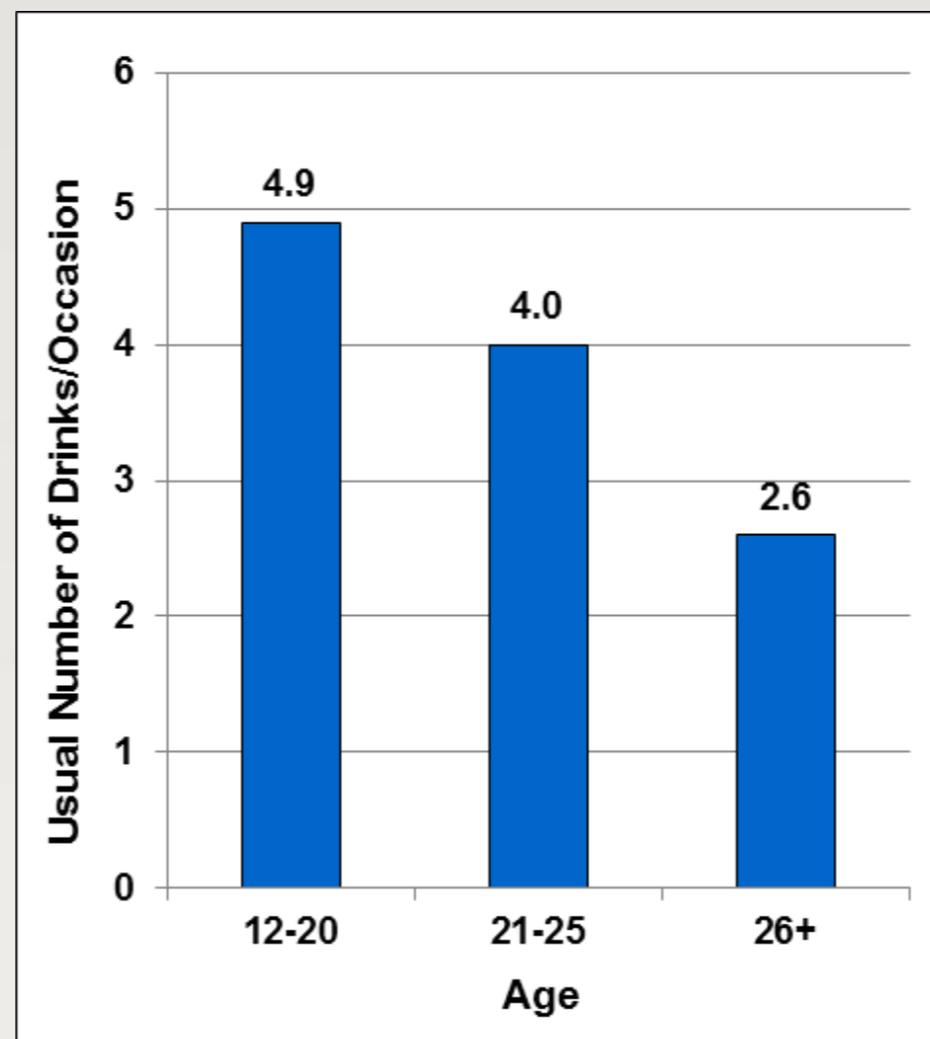
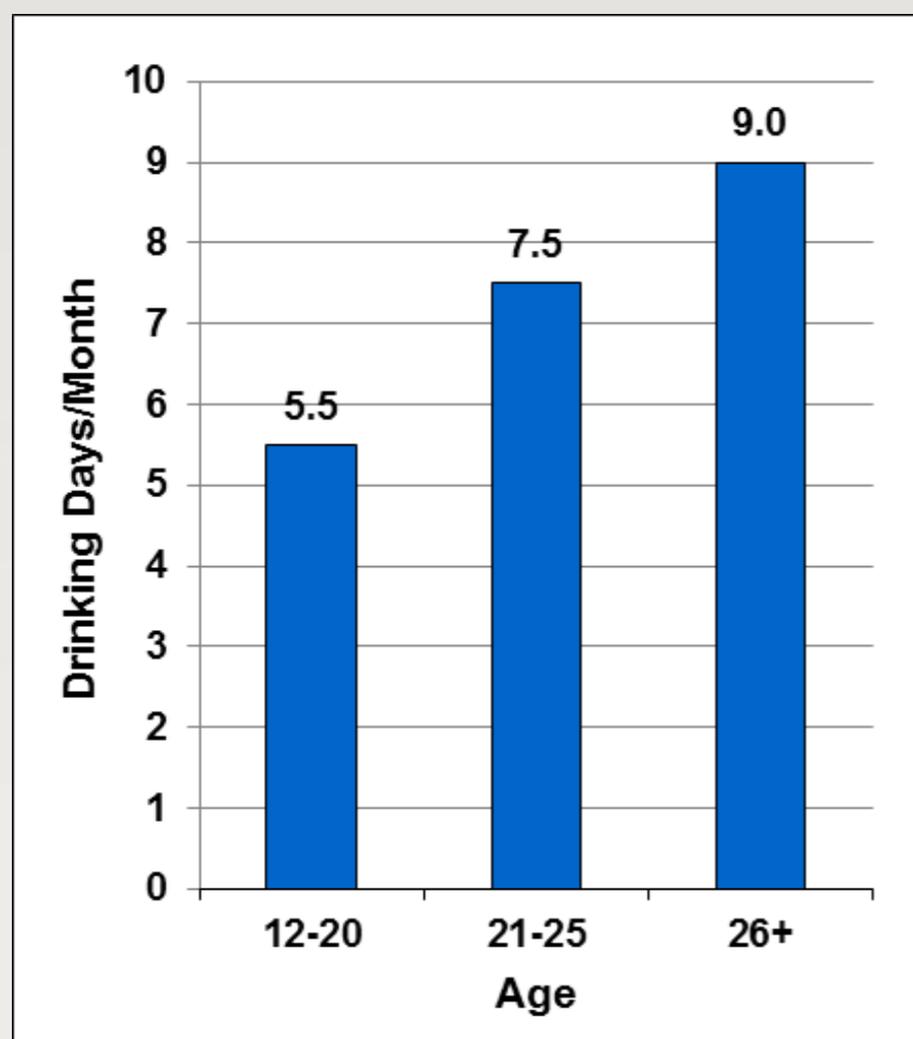
*Alcohol includes binge drinking (7.4%); tobacco includes cigarettes (7.8%).

Many young drinkers binge when they drink.

- **Binge drinking accounts for more than 90 percent of the alcohol consumed by youth.**
 - **Youth ages 12–20 drink 11 percent of all alcohol consumed in the United States.**
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Many young drinkers binge when they drink.

Although youth drink less often than adults do,
when they do drink, they drink more.



Drinking Days per
Month and Number of
Drinks per Occasion
for Youth (12–20),
Young Adults (21–25) ,
and Adults (≥26)

Underage drinking results in a range of acute consequences.

- **Deaths** of young people under age 21 as a result of underage drinking. Each year in the U.S. there are about:
 - 1,900 deaths from motor vehicle crashes;
 - 1,600 deaths from homicides;
 - 1,200 deaths from alcohol poisoning, falls, burns, and drowning;
 - 300 deaths from suicides.
 - **Injuries**
 - In 2008 alone, about 190,000 people under age 21 visited an emergency room for alcohol-related injuries.
 - **Economic Cost**
 - In 2006, underage drinking cost an estimated \$27 billion.
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Underage drinking increases risk for other adverse consequences.

- **Impairs judgment**
 - Drinking can lead to poor decisions about engaging in risky behavior, including drinking and driving, sexual activity (such as unprotected sex), and aggressive or violent behavior.
 - **Increases the risk of physical and sexual assault**
 - Underage drinkers are more likely to carry out or be the victim of a physical or sexual assault after drinking than others their age who do not drink.
 - **Can lead to other problems**
 - Underage drinkers may have trouble in school or with the law.
 - Drinking alcohol is associated with the use of other drugs.
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Underage drinking can also have long-term consequences.

Affects the developing brain

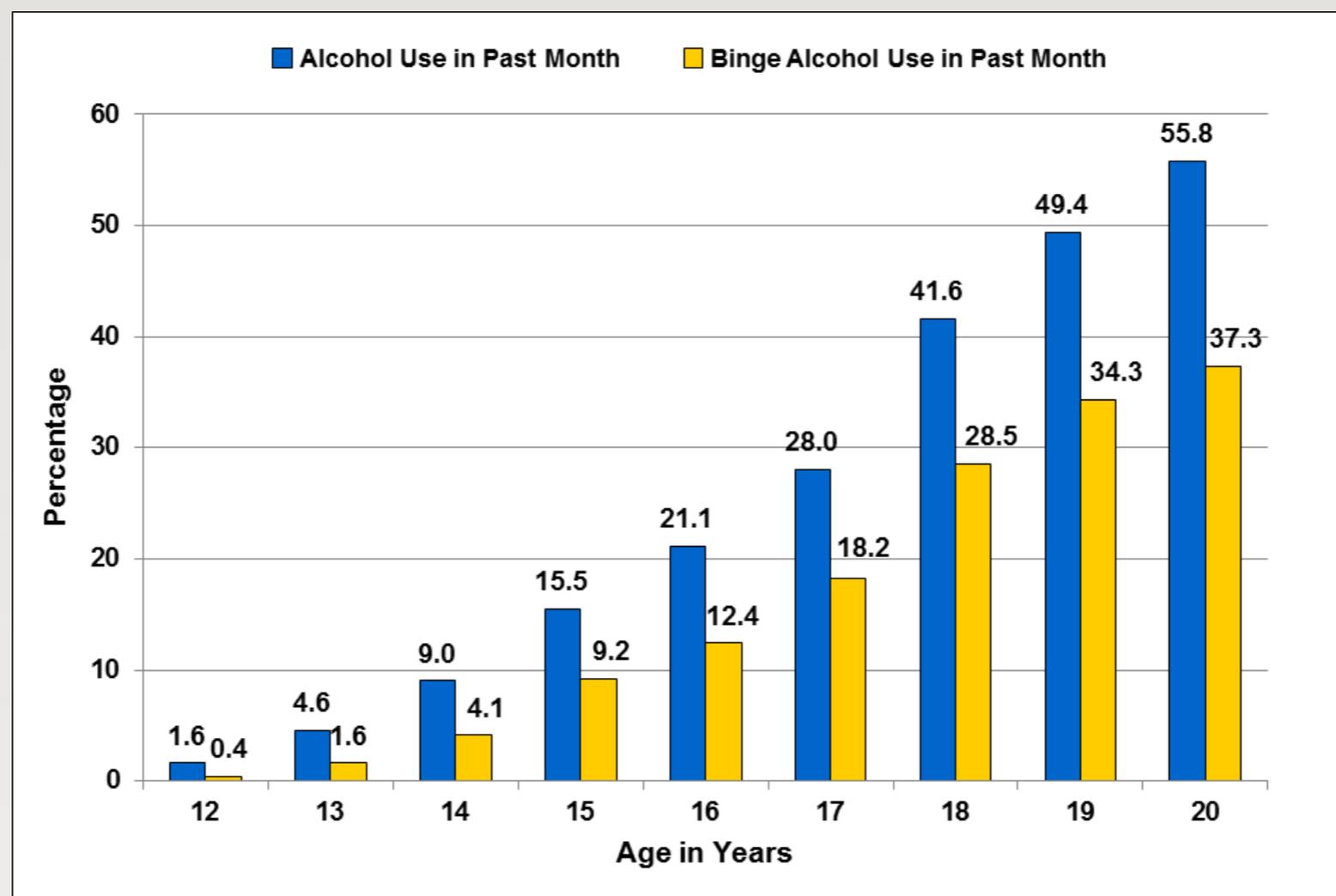
- Young people's brains develop well into their twenties.
- During adolescence, the brain undergoes significant growth and remodeling.
- Alcohol can alter this development, potentially affecting both brain structure and function, and may cause cognitive or learning problems.

Increases the risk of alcohol problems later in life

- People who start drinking before the age of 15 are four times more likely to meet the criteria for alcohol dependence at some point in their lives.
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Underage drinking is a developmental issue.

Current and Binge Alcohol Use Among Persons Ages 12–20



Note the *distinct age-related pattern*; drinking alcohol and binge drinking become more prevalent as young people grow older.

Underage drinking is a developmental issue.

Underage drinking is affected by development.

Risk-taking is common among many adolescents.

- **As children mature, it is natural for them to assert their independence, seek new challenges, try new things, and take risks.**
- **Underage drinking is a risk that attracts many developing adolescents and teens. Many want to try alcohol, but often do not fully recognize its effects on their health and behavior.**

Other developmental factors contribute:

- **Peer pressure;**
 - **Increased independence and unsupervised time; and**
 - **Increased responsibility and stress.**
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Underage drinking is a developmental issue.

Underage drinking affects development.

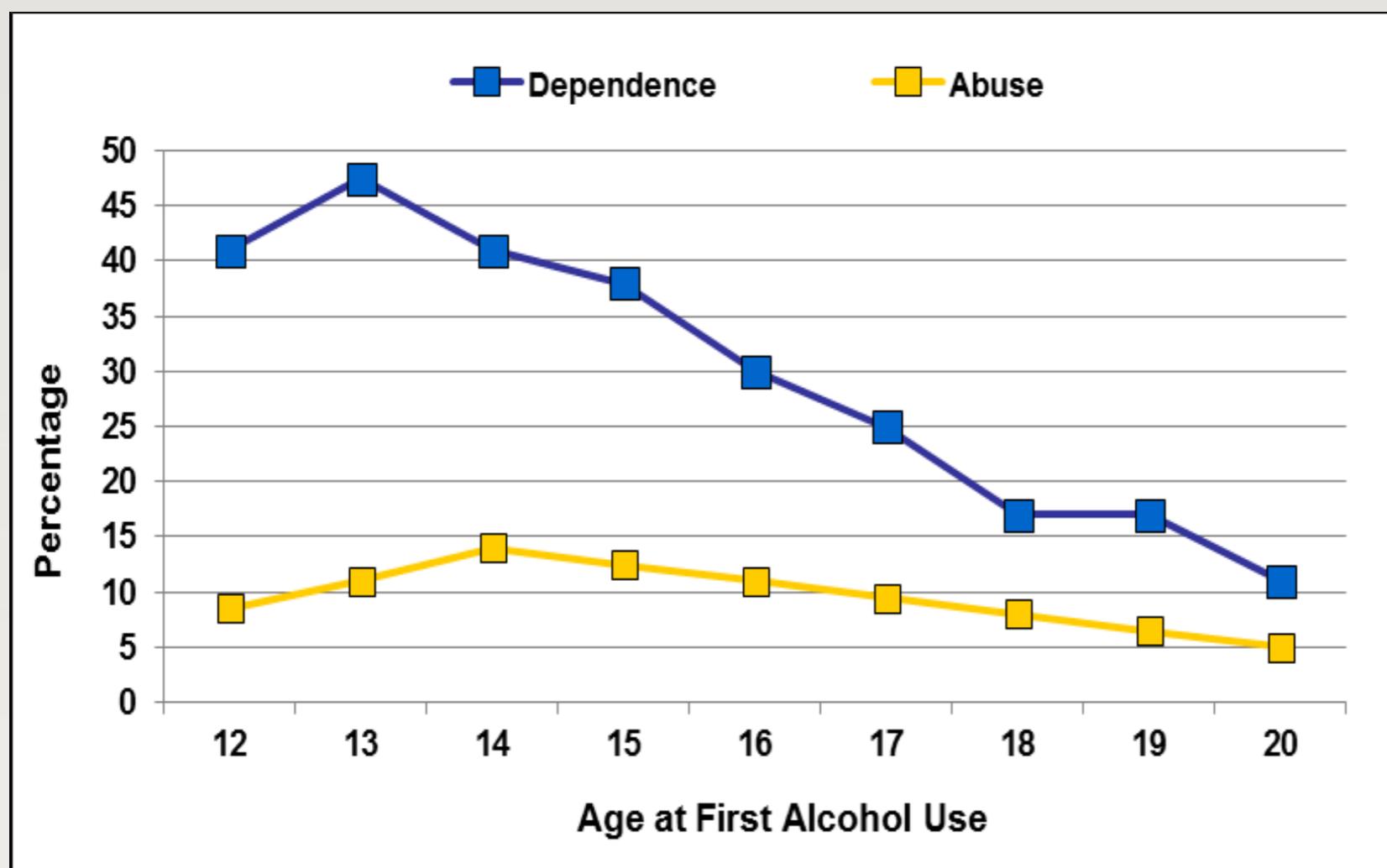
- **Underage drinking can affect developmental trajectories and negatively impact development.**

Examples include:

- **School failure;**
 - **Trouble with the law; and**
 - **Increased liability for alcohol addiction.**
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Underage drinking is a developmental issue.

Underage drinking can affect developmental trajectories and negatively impact development.



Ages of Initiation and Levels of DSM Diagnoses for Alcohol Abuse and Dependence

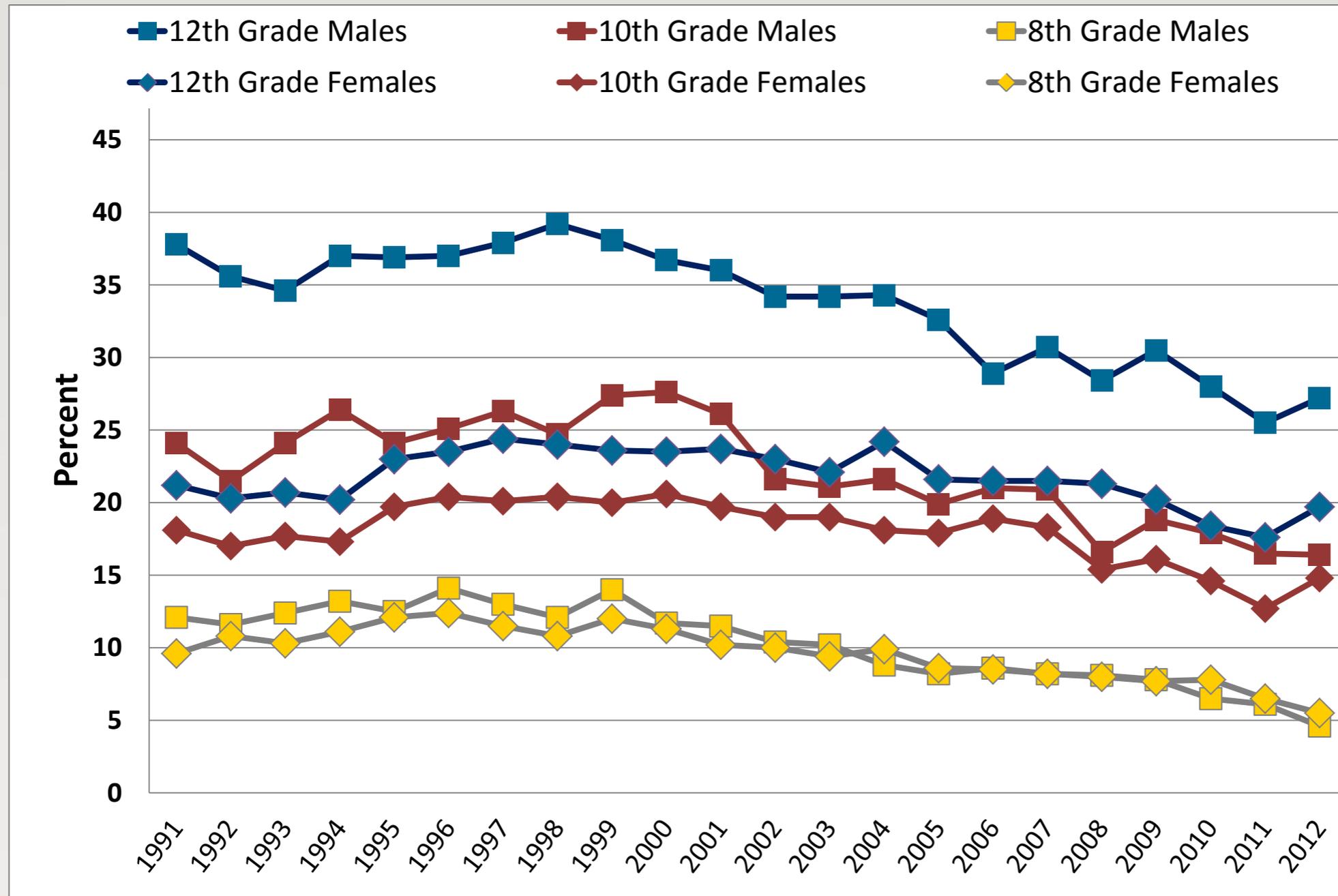
This figure shows the association of early drinking and alcohol dependence.

So how do we address this public health issue?

- Track progress over time with epidemiologic studies.
 - Initiate research to investigate key questions.
 - Ensure that interventions take development into account.
 - Disseminate research-based information about interventions to those who can put this knowledge to work.
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Tracking Progress

Epidemiological Tracking of Rates of Binge Drinking Among Male and Female 8th, 10th, and 12th Graders



Rates of Binge Drinking in the Past 2 Weeks Among Male and Female 8th, 10th, and 12th Graders, 1991–2012

So what do we do now?

Stimulating and supporting research to investigate key questions

Areas of Investigation

Alcohol and the developing adolescent brain--Significant questions remain:

- What are the effects of both long- and shorter-term child and adolescent alcohol exposure on the developing human brain and how do they affect brain function and behavior?
 - What is the effect of timing, dose, and duration of alcohol exposure on brain development?
 - To what extent do these effects resolve or persist?
 - Do the same processes that confer adaptability of the adolescent brain to its environment also make it more vulnerable to alcohol-induced changes, and do such changes increase an individual's risk for future dependence?
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So what do we do now?

Ensure that interventions take development into account.

Child and adolescent alcohol screening

- **NIAAA recently released an alcohol screening guide for health care providers to identify alcohol use and alcohol use disorders in children and adolescents, and to identify risk for alcohol use, especially for younger children.**

The guide is empirically based and is currently being evaluated in a variety of “real world” settings.

So what do we do now?

Disseminate research-based information about interventions to those who can put this knowledge to work.

- **NIAAA works to disseminate research-based information and materials to multiple audiences**
 - **Websites**
 - **Publications**
 - **Collaborates with partners, (federal and other) to get information to those who need it.**
 - **Example: this series of webinars.**
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Thank you.

For more information, please visit our website:

<http://www.niaaa.nih.gov>