A LIFETIME OF CONVERSATIONS

Kids, Alcohol, and the Developing Brain





A LIFETIME OF CONVERSATIONS

Kids, Alcohol, and the Developing Brain

A new survey of parents of children ages 10-17 shows that most talk to their kids about alcohol consumption, but they may not be sharing important information about WHY underage drinking is harmful.

Conversations About Underage Drinking

Research shows that when conversations about alcohol go up, underage drinking goes down.



Impact of Alcohol on the **Developing Brain**

The impact on brain development and long-term effects of alcohol are important reasons for youth to avoid underage drinking.





the number one influence on their decisions about

76 percent of parents have talked

to their kids at least once in the past year about alcohol consumption.



36%

36 percent of parents feel comfortable in approaching their child to discuss underage drinking.

23% confident

When asked WHY kids shouldn't drink alcohol...

PARENTS SAY:

"It impairs judgement"

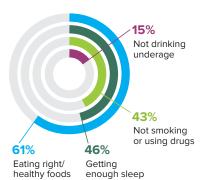
"It can lead to unintended consequences like car crashes and alcohol

poisoning"

MORE THAN 40 percent of parents do not

list the impact on brain development or the long-term effects of alcohol.

What parents consider important for living a healthy lifestyle:



Parents are the **#1 Influence**



underage drinking.

Youth say that parents are the #1 influence on their decision to drink—or not drink-alcohol.

GfK Roper Youth Report, Americans age 13-17, 2017



Only two in five parents (41 percent) begin the conversation when their kids

AGES 10-14



haven't talked to their kids think they are too young.

Early adolescence is a key time for parents to talk to their kids about alcohol consumption to help delay the onset of drinking.

WHAT CAN



Talk to kids about negative effects of underage drinking on the developing brain



Model responsible behavior regarding alcohol



Help kids say YES to a healthy lifestyle and NO to underage drinking

Start the conversation! Find conversation starters,

resources, brain health videos and more at

AskListenLearn.org



EXECUTIVE SUMMARY

The vast majority of America's parents understand the importance of talking to their kids about the dangers of underage drinking. Whether it's while driving to school, helping with homework, or sitting at the dinner table, parents sense that these precious little windows of opportunity offer the chance to learn what's going on in a kid's life and to seize the moment for a crucial conversation.

new nationwide survey of parents with kids ages 10-17 living at home, commissioned by *Ask*, *Listen*, *Learn*: Kids and Alcohol Don't Mix, a program of the Foundation for Advancing Alcohol Responsibility (Responsibility.org), shows encouraging news: an increasing number of parents are taking advantage of these moments to discuss underage drinking. A majority of parents (76 percent) have talked to their kids about the dangers of drinking alcohol at least once in the past year, an increase of 7 percent, proportionally, since 2003.¹ During this same time period, there has been a continual decline in the prevalence of underage drinking among teens in the U.S. Although rates have decreased significantly since 1991, experts believe that emphasizing to kids the risks to their brain can help accelerate this momentum.

Nearly three out of five parents believe underage drinking is one of the most important conversations for them to have with their child between the ages of 10-14, with an average age of 11 and a half years identified for when to start talking about alcohol with children. And compared to other necessary and important conversations parents have with their children, 77 percent said talking about alcohol is easy or very easy. When approaching their children to discuss alcohol and underage drinking, parents report feeling comfortable (36 percent), confident (23 percent), prepared (17 percent) and open-minded (16 percent). For parents who may not feel comfortable or confident discussing underage drinking with their kids, AskListenLearn.org provides resources for parents, like conversation starters and how-tos.



RALPH BLACKMAN

As a father, I quickly learned that teaching and modeling healthy behavior was only possible through good communication with my kids. Research shows that when conversations between parents and kids about alcohol go up⁴, underage drinking rates go down.⁵

This is a trend we can all take pride in—parents, teachers, public officials, law enforcement, and other organizations that have worked hard to help eliminate the dangers of underage drinking. However, our job is not done.

Encouraging kids to make healthy lifestyle choices is easier than you may think – especially when it comes to finding the best time and the most effective way to discuss underage drinking. Compared to other necessary conversations parents have with kids, like conversations about sex or drugs, most parents (77 percent) think discussing alcohol and underage drinking is easy.

Additionally, although a majority of parents (65 percent) think that a child's peers are a major influence on their decisions about underage drinking, research shows that 69 percent of 10-to-18-year-olds report that their parents actually are the leading influence in their decision about drinking alcohol.⁶

As the strongest influencers, parents should begin conversations about underage drinking early in a child's life—long before they are presented with the opportunity to drink—so that they understand the associated dangers, especially to their developing brains.

The Ask, Listen, Learn campaign provides sciencebased resources to support parents and teachers in their conversations with youth about the dangers of underage drinking.

Together, we can help kids say YES to a healthy lifestyle and NO to underage drinking.

3

EXECUTIVE SUMMARY CONTINUED

owever, these conversations aren't always happening on a regular basis: one in four parents surveyed say they either haven't talked to their children about underage drinking or can't recall if they had. Many parents who have not discussed alcohol with their child in the past year cite their reasoning as their child is too young (46 percent) or they trust them (37 percent).

When asked about the most important reasons kids should avoid alcohol, parents emphasize how alcohol interferes with judgment and the ability to make good decisions (79 percent), as well as the unintended consequences of consuming too much (77 percent), such as alcohol poisoning and car crashes. However, parents are less likely to focus on the long-term negative impact that alcohol has on kids' developing brains and bodies.

As the most powerful organ in the human body, the brain controls every aspect of what we do, from how we move and think, to how we eat and walk, to how we process information and make decisions.² Since the brain is still developing during adolescence, exposing the brain to alcohol may interrupt key processes of development and lead to heightened risk for subsequent alcohol abuse disorders, cognitive dysfunction, and other neurological impairments.³

This report takes a closer look at parents' viewpoints on underage drinking and the conversations they are having (or postponing) with their kids. Within the report there is a deeper look at the developing brain, perspectives from health and parenting experts, conversation-starters for various stages of adolescence, and debunked myths and misunderstandings surrounding underage drinking.

77%

of parents emphasize unintended consequences of underage drinking such as alcohol poisoning and car crashes, while

MORE THAN

40%

of parents do not list the impact on brain development or the long-term effects of alcohol.







Tweens are undergoing many emotional and physical changes, and they're fascinated by how their bodies and minds operate. This is why *Ask, Listen, Learn* focuses on brain health and function in its science-based resources.

Each area of the brain controls different aspects and functions within the body and mind. Here is how alcohol can affect each area:

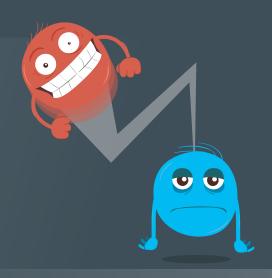


THE BRAIN

The brain is the body's control center. It processes information to and from the senses, and manages vital involuntary actions such as breathing and maintaining a regular heart rate. When the brain becomes impaired by alcohol, its functions become slowed down.⁷

THE CENTRAL NERVOUS SYSTEM

The central nervous system carries messages along the spinal cord, between the brain and every part of the body. It helps control many activities in the body, such as digestion and movement.⁸ When impaired by alcohol, the central nervous system slows down, and the body has difficulty functioning and reacting.⁹



THE CEREBELLUM

The cerebellum controls physical and verbal coordination.¹⁰ When it is impaired by alcohol, people have difficulty speaking clearly and walking steadily.¹¹

KEEP YOUR BRAIN IN SHAPE FOR THE FUTURE

Kids have lofty goals from a young age—they want to become astronauts, artists, professional sports stars, or doctors. A great way to talk to youth about the reasons they should avoid underage drinking is by relating to these goals, and talking about how they need to keep their brains and bodies healthy and make good decisions in order to do well in school, sports, and beyond.

5

THE DEVELOPING BRAIN CONTINUED.





THE CEREBRAL CORTEX

The cerebral cortex is divided into four lobes. The frontal lobe is responsible for decision-making, and when impaired by alcohol, can hinder the ability to think clearly and make good decisions.¹² This is the last part of the brain to develop, and contributes to the prevalence of risk-taking in adolescents.13



THE HIPPOCAMPUS

The hippocampus, part of the limbic system, processes, stores, and categorizes memories. When impaired by alcohol, the function of the hippocampus begins to falter, and it becomes harder for the brain to create and retain memories.¹⁴



THE HYPOTHALAMUS

The hypothalamus controls body temperature, thirst, hunger, and other bodily functions. When impaired by alcohol, the hypothalamus has a harder time receiving messages from the body, which can create hormone imbalances, leading to discomfort, headaches, and more.15

THE MEDULLA

The medulla is in charge of our cardiac and respiratory systems, controlling vital, life-sustaining functions, such as breathing, swallowing, and more.¹⁶ When impaired by alcohol, those functions can become compromised, leading to alcohol poisoning and potentially even death.¹⁷





Ask, Listen, Learn asked a panel of medical, parenting, and other experts some of the most frequently asked questions surrounding alcohol consumption.



DEBORAH GILBOA. MC

family physician, youth development expert and member of Responsibility.org's national advisory board

Q: What is a reasonable age to begin discussing underage drinking?

A: "Adolescence includes critical phases in brain development. The area of the brain that controls reasoning - helps us think before we act - matures later in the third decade of life. The sooner that parents speak with their children about the dangers of drinking alcohol underage, the better. Create a foundation for these conversations with kids by answering their questions simply and clearly at any age, and actively discuss this topic by age nine or ten. At this time, kids are becoming very curious about their growing bodies and brains and are open to learning about how alcohol can impact both."



LETICIA BARR
parenting expert and member of Responsibility.org's education advisory board

Q: What is the best way to start the conversation?

A: "As a mom and former educator, I always start by asking questions, rather than lecturing. Ask what your children think, what they've heard, and what they've noticed. This will help you to understand what your kids already know—and what they don't. Listen to their answers, and then add your insights. I also think it's important to be open and honest about your own drinking behavior. Talk to your kids about how you drink responsibly, whether that's organizing a designated driver when you're going to a party, or saying no to another drink at dinner. Be sure that your kids understand drinking as an adult is a choice that comes with responsibilities just like driving a car or living alone."



CHARLES CURIE, MA. ACSW

former Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA)

Q: What has the biggest impact on kids' consumption of alcohol?

A: "As a whole, the U.S. has made significant progress over the last several years to reduce alcohol consumption in underage youth. At the same time, conversations between kids and their parents have increased 73 percent. This suggests that parent conversations about alcohol are working effectively to delay drinking among youth. Beyond the rates of underage drinking, kids seem to be better understanding the health risks associated with this behavior. According to the annual Monitoring the Future survey, many students in 8th, 10th, and 12th grades disapprove of alcohol consumption. The long-term impact of these successes will be seen for decades to come, but this work is not done. Parents are a critical component to maintaining this progress. Initiating fact-based conversations with their kids is just one important way they can continue to help further reduce underage drinking."



JILL COOK, MED
Assistant Director of American School Counselor
Association

Q: How can parents complement what schools are teaching their kids about alcohol consumption?

A: "School counseling and health education programs are important for educating students about the impact alcohol and drug use can have on their psychological and physical development. These programs can be more effective when families reinforce the concepts introduced at school at home through open and honest conversations. By addressing students' questions and curiosities, families can play a large role in how a child perceives alcohol consumption and whether or not to say no to underage drinking."

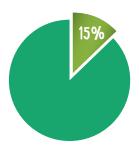
7

SURVEY FINDINGS

Brain health takes a back seat in conversations about alcohol.

Parents are doing a good job talking to their kids about alcohol—most have had conversations on the topic one or more times in the past year (76 percent). However, these conversations may not be focused on the impact of alcohol on the brain, one of the most important reasons that kids should delay drinking.

When asked to name reasons why children should avoid underage drinking, more than 4 out of 10 parents do not list the impact on brain development, or the long-term effects on the developing body. Parents are more likely to emphasize how alcohol impairs judgement, which is just one of many ways alcohol can impact the brain. Additionally, only 15 percent of parents surveyed say that abstaining from underage drinking is one of the most important things for children in order to live a healthy lifestyle. Instead, parents ranked the top priorities for healthy lifestyle practices as eating healthy foods, getting enough sleep, and not smoking or using drugs. This suggests parents may not be adequately associating the dangers of underage drinking with living a healthy lifestyle.



Only 15% of parents surveyed include abstaining from alcohol as an important part of a healthy lifestyle

Research shows that young people's brains develop and mature throughout adolescence.¹⁸ Before kids become curious about alcohol, it's important that parents communicate that underage drinking can alter brain development, potentially affecting both brain structure and function, which may cause cognitive or learning problems and make the developing brain more prone to alcohol use disorder.¹⁹

Parents may be missing their moment.

Most parents are concerned with underage drinking (58 percent). Nonetheless, half of all parents (50 percent) are waiting or would wait until their child sees something in the media (on TV, social media, the internet) or until their child expresses curiosity about alcohol to start the conversation. However, experts warn parents not to wait. Research from SAMHSA shows that adults who had taken their first drink before the age of 15 were six times more likely to experience alcohol problems than those who started drinking after age 21.²⁰

For parents of children ages 10-17 who have not yet talked with their kids, 46 percent say their children are too young, including 60 percent of parents with children ages 10-14. However, according to the 2017 Monitoring the Future study commissioned by the National Institute for Drug Abuse, by the time children reach 8th grade, around age 13, some 23 percent report already having consumed alcohol at least once in their lifetime.



23% OF CHILDREN REPORT HAVING CONSUMED ALCOHOL AT LEAST ONCE BY 8TH GRADE

Research shows the 10-to-14 age range is a critical time for kids: they start to form stronger, more complex friendships and peer relationships, experience increased peer pressure, become more aware of their bodies as puberty approaches, face new academic challenges, become more independent, and increase their attention span.²¹ Having developmentally appropriate conversations from an early age allow children to understand parents' opinions about underage drinking and. In turn, fall in line with their expectations.²²

i

SURVEY FINDINGS CONTINUED



"Not my child" perception may be part of the problem.

Nearly six in 10 parents (58 percent) of children ages 10-17 say that their child will NOT be faced with making a decision in any way about alcohol in the next three months. More specifically, only 30 percent of parents of children ages 15-17 think their child will be faced with a decision about alcohol in the next three months. This contrasts with the current alcohol consumption taking place among today's youth. Thus, it is vital that parents take steps to talk to their children about the dangers, even if they trust their child's judgement. According to the 2016 National Survey on Drug Use and Health, 7.3 million Americans between 12 and 20 years of age report current alcohol consumption; this represents 19 percent of this age group for whom alcohol consumption is illegal.

ONLY 30%

of parents of children ages 15-17 think their child will be faced with a decision about alcohol **in the next three months.**

MYTHS AND MISUNDERSTANDINGS

MYIH My kid is too young to talk to them about drinking.

Kids are very observational and express curiosity about alcohol at a young age. It's important to arm them with the knowledge they need to say no to underage drinking, long before an opportunity arises. Only two in five parents surveyed (41 percent) began conversations about alcohol with their kids during the ages of 10-14 despite thinking it's an appropriate conversation to start at 11 and a half. However, 53 percent of 8th graders think it would be easy to get alcohol, and this perception increases with age.²³ Parents should start conversations early to delay the onset of drinking.

WITH Kids are most influenced by their peers, and will drink if their friends do.

While six out of ten parents identify a child's friends/peers as a leading influence on their child's decisions whether or not to drink alcohol, they also cite themselves (parents) as a leading influence (65 percent and 64 percent, respectively). However, teens themselves identify parents as the strongest influence on whether they drink or not. According to the 2017 GfK Roper Youth Report, 69 percent of 13- to 17-year olds cite the influence of their parents when it comes to decisions regarding underage drinking. It is this very influence that is a key reason for parents to be actively engaged in discussing alcohol with their children and talking through hypothetical situations that may arise with peers, and how best to respond.



MYTH I spoke with my kid once about alcohol. Isn't that enough?

Frequent and ongoing conversations are key to establishing dialogue on responsibility with alcohol. Sixty-one percent of parents with kids ages 10 to 14 discussed alcohol with their child two or more times in the past year. As with other high-risk behaviors, prevention plays a more important role than later intervention and has been shown to be more effective. Conversations regarding alcohol should evolve as a child develops, starting out with short and simple answers to their questions, and growing into more indepth discussions. According to a 2016 survey commissioned by Responsibility.org there are two main discussion points mentioned by more than two-thirds of parents during conversations about alcohol with their kids ages 6-17: Alcohol consumption is illegal if you are under 21; and drunk driving is dangerous.

MYTH The immediate consequences that can occur from drinking, like car crashes, alcohol poisoning, and injuries should be the number one reason we tell kids not to drink.

When asked about the most important reasons for youth to avoid underage drinking, 77 percent of parents listed these types of unintended consequences. However, even without these unfortunate incidents, alcohol can still be harmful to the developing brain in the long-term. While long-term consequences are harder to see, kids should be made aware of the risks to their brain and health if they begin drinking at a young age. For example, a 2010 study from the University of California, San Diego compared the brain scans of teens who drank heavily with the scans of teens who didn't drink. The study found damaged nerve tissue in the brains of the teens who drank, and the binge drinking in teens can cause brain damage that can affect thinking and memory skills.²⁶



A LIFETIME OF CONVERSATIONS

ids ask questions, and sometimes it's hard to know what to say, especially when a maturing child is curious about alcohol. Despite some belief that the brain is fully developed at puberty, research shows that certain parts of the brain, such as the frontal lobes—responsible for "executive functions" such as planning, working memory, and impulse control—are among the last to mature

Despite the challenges and growing pains children face, parents should use this opportunity to shape a lifetime of conversations around alcohol responsibility. Responsibility.org offers a wealth of resources to help parents, teachers, and kids engage in a lifetime of conversations. Check out the timeline and supporting programs below. Each is designed for the moments that help parents and children make healthy, responsible decisions.

HOW TO APPROACH THE CONVERSATION AT EVERY AGE



AGES 5-9

EARLY ELEMENTARY SCHOOL

APPROACH Provide short answers to kids' questions about why they can't try adult beverages.

RESOURCE Responsibility.org's #TalkEarly campaign helps empower parents to be confident in their own decisions regarding alcohol and sets the foundation for a lifetime of conversations about alcohol consumption with kids. Parent influencers help to set the tone for the campaign, as more and more parents go online to engage with parenting communities and receive advice. Visit Responsiblity.org/TalkEarly to learn more.

AGES 14-18

HIGH SCHOOL

APPROACH Provide strategies for teens to use in social situations when they don't want to drink, but may feel pressured. Discuss rules, boundaries, and decision-making.

RESOURCE Responsibility.org's *IKnowEverything* highlights the dangers of drunk driving and distracted driving, for both parents and young adult drivers.

AGES 9-13

LATE ELEMENTARY AND EARLY MIDDLE SCHOOL

APPROACH Discuss the impact alcohol can have on the developing brain and the health risks associated with drinking underage. Start conversations by asking questions to see what kids already know and observe, rather than lecturing. Verbally share information about personal decisions regarding alcohol and drinking responsibly as an adult.

RESOURCE Ask, Listen, Learn: Kids & Alcohol Don't Mix offers innovative, science-based digital resources for parents, teachers, school counselors, nurses, and other educators to teach kids about what the brain does, how alcohol effects it, and what that does to you.

AGES 18-22

COLLEGE

APPROACH Continue to have ongoing and meaningful conversations about choices with regard to alcohol, especially the differences between low- and high-risk drinking.

RESOURCE Parents, You're Not Done Yet is an online resource that provides parents with tools for having a conversation about alcohol with their kids before and after they head to college.



he Lifetime of Conversations survey tells us that parents are doing a good job of talking to their kids about alcohol, but that brain health may be taking a back seat in these discussions. *Ask, Listen, Learn* takes a new twist on an old story by aiming to shift underage drinking conversations towards the impact on the developing brain.

By starting these conversations early, and reinforcing what kids learn in school about brain health and alcohol consumption, parents can help their children develop a deeper understanding of why they should avoid drinking.

Through *Ask, Listen, Learn's* science-based and kid-friendly videos, games and lessons, parents can make underage drinking a topic that the entire family feels comfortable discussing regularly – on the same plane as eating nutritious foods and getting adequate exercise. Together, we can help kids say YES to a healthy lifestyle and NO to underage drinking.

SURVEY METHODOLOGY

The study was conducted online with GfK's Omnibus, using the web-enabled "KnowledgePanel," a probability-based tool designed to represent the U.S. general population, not just the online population. The study consisted of 1,000 nationally representative interviews conducted between November 10 and 12, 2017 among adults aged 18+ with at least one child between ages 10 and 17. The margin of error is +/-3 percentage points.

SAY "YES" to a Healthy Lifestyle

AND "NO" to Underage Drinking

M

CITATIONS

- 1 Foundation for Advancing Alcohol Responsibility. (2003, May). Wirthlin Worldwide National Quorum Poll
- 2 Society for Neuroscience. (2017). BrainFacts. http://www.brainfacts.org/
- 3 National Institute on Alcohol Abuse and Alcoholism. (2017, February). Underage Drinking. Retrieved from https://pubs.niaaa.nih.gov/publications/UnderageDrinking/UnderageFact.htm
- 4 Foundation for Advancing Alcohol Responsibility. Knowing the Facts. http://asklistenlearn.org/parents/know-the-facts/
- 5 National Institute on Alcohol Abuse and Alcoholism. (2017, February). Underage Drinking. Retrieved from https://pubs.niaaa.nih.gov/publications/UnderageDrinking/UnderageFact.htm
- 6 GfK Roper. (2017). GfK Roper Youth Report, Americans age 13-17. http://www.alcoholstats.com/wp-content/uploads/2017/03/Microsoft-PowerPoint-Influences-on-Youths-Decisions-about-Drinking-2017-for-alcoholstats.pdf
- 7 Heffner, C. L. Chapter 2: Section 3: The Brain and Nervous System. Retrieved from https://allpsych.com/psychology101/brain/
- 8 National Library of Medicine. Central Nervous System | PubMed Health Glossary. Retrieved from https://www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0024762/
- 9 Mukherjee, S. (2013). Alcoholism and its Effects on the Central Nervous System. Current Neurovascular Research, 10(3), 256-262. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/23713737
- 10 Manto, M., Bower, J. M., Conforto, A. B., Delgado-García, J. M., Guarda, S. N., Gerwig, M., . . . Timmann, D. (2011). Consensus Paper: Roles of the Cerebellum in Motor Control—The Diversity of Ideas on Cerebellar Involvement in Movement. The Cerebellum, 11(2), 457-487. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4347949/
- 11 National Institute on Alcohol Abuse and Alcoholism. (2004). Alcohol's Damaging Effects on the Brain. Alcohol Alert, 63. Retrieved from https://pubs.niaaa.nih.gov/publications/aa63/aa63.htm
- 12 Crews, F. T., & Boettiger, C. A. (2009). Impulsivity, frontal lobes and risk for addiction. Pharmacology Biochemistry and Behavior, 93(3), 237-247. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2730661/
- 13 U.S. Institute of Medicine and National Research Council Committee on the Science of Adolescence. (2011). The Science of Adolescent Risk-Taking: Workshop Report (pp. 35-47, Rep.). Washington, DC: National Academies Press
- 14 Hiller-Sturmhöfel, S., & Swartzwelder, H. S. Alcohol's Effects on the Adolescent Brain—What Can Be Learned From Animal Models. Retrieved from https://pubs.niaaa.nih.gov/publications/arh284/213-221.htm
- 15 Zahr, N. M., & Sullivan, E. V. Translational Studies of Alcoholism: Bridging the Gap. Retrieved from https://pubs.niaaa.nih.gov/publications/arh313/215-230.htm
- 16 Heathline. (2015, March 4). Medulla Oblongata Function, Definition & Location | Body Maps. Retrieved from https://www.healthline.com/human-body-maps/medulla-oblongata
- 17 University of Puget Sound. Alcohol's Effect on Your Brain. Retrieved from https://www.pugetsound.edu/student-life/counseling-health-and-wellness/training-prevention/substance-abuse-prevention/alcohol-you/alcohols-effect-on-your-brain/
- 18 National Institute on Alcohol Abuse and Alcoholism. (2017, February). Underage Drinking. Retrieved from https://pubs.niaaa.nih.gov/publications/UnderageDrinking/UnderageFact.htm
- 19 National Institute on Alcohol Abuse and Alcoholism. (2017, February). Underage Drinking. Retrieved from https://pubs.niaaa.nih.gov/publications/UnderageDrinking/UnderageFact.htm
- 20 U.S. Substance Abuse and Mental Health Services Administration. (2017). National Drug Use and Health Survey [Database]. Retrieved from https://www.samhsa.gov/data/population-data-nsduh/reports?tab=38
- 21 U.S. Centers for Disease Control and Prevention. (2016, March 15). Middle Childhood (9-11 years of age). Retrieved from https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/middle2.html
- 22 National Institute on Alcohol Abuse and Alcoholism. (2017, February). Parenting to Prevent Childhood Alcohol Use. Retrieved from https://pubs.niaaa.nih.gov/publications/adolescentflyer/adolflyer.htm
- 23 University of Michigan. (2017) Monitoring the Future Survey [Data table]. Retrieved from http://monitoring-thefuture.org/data/data.html
- 24 Siqueira, L., & Smith, V. C. (2015). Binge Drinking: Clinical Report. Pediatrics, 136(3). Retrieved from http://www.pediatrics.org/cgi/doi/10.1542/peds.2015-2337
- 25 Foundation for Advancing Alcohol Responsibility and Block Research, Inc. (2017, June). #Talkearly Research Final Report
- 26 Squeglia, L. M., Spadoni, A. D., Infante, M. A., Myers, M. G., & Tapert, S. F. (2009). Initiating moderate to heavy alcohol use predicts changes in neuropsychological functioning for adolescent girls and boys. Psychology of Addictive Behaviors, 23(4), 715-722. Retrieved from http://dx.doi.org/10.1037/a0016516