YOUTH COLLABORATIVE

Adolescence is an important period of development, growth, and opportunity. The Youth Collaborative is dedicated to fostering healthy adolescent development and positively impacting the community. We offer clinical services, research opportunities, and education programs focused on preventing and addressing adolescent substance use, while also encouraging young people to pursue careers in science and discovery.

Call 843-792-9257 | Text YOUTH to 44332 | Visit muschealth.org/youthcollab | Email youth@musc.edu





CLINICAL CARE SERVICES

MOTIVATE

Youth substance use clinical care services are provided through the Motivate Program of MUSC Health as part of the Institute of Psychiatry. The primary goal of this treatment program is to enhance a teen's motivation to change their substance use and develop basic skills needed to quit using or gain control of substance use. Services are available to teens ages 12-18.

Services range in scope and include a combination of direct medical intervention as well as counseling and therapy services. Services can be provided as individual, family, or group therapy and can be coordinated with an insurance provider or self-paid much like going to any other health provider in the community.

EDUCATION & OUTREACH

JUST SAY KNOW

The Just Say Know Program is a presentation and hands-on learning experience designed to teach students the science behind developing drug and alcohol addiction. It is an hour-long program based on research findings in neuroscience, delivered in a way that is both entertaining and engaging. It is designed for use in students sixth grade and up.

TEEN SCIENCE AMBASSADOR

The Teen Science Ambassadors internship is open to high school juniors and seniors with a passion for science. Our ambassadors will learn about career opportunities in Science, Technology, Engineering and Mathematics (STEM), job skills, and learn from professionals and other students in the STEM fields. Ambassadors will join our team for weekly meetings at MUSC. This program is a great opportunity for students to gain exposure to clinical research.

WHY PARTICIPATE IN RESEARCH?

- Participation is voluntary and safety is the top priority of the research team.
- Engaging in research is a great way to contribute to science.
- Information gained from research participation may help in the understanding of substance use disorders and possible treatments.
- All studies have been approved for scientific merit and are sponsored by the National Institutes of Health.
- The Institutional Review Board at MUSC has approved the studies for meeting the requirements of the Office for Human Research Protections of the U.S. Department of Health and Human Service.
- To help protect participants' privacy, a Certificate of Confidentiality from the National Institutes of Health is in place.
- All research data is kept strictly confidential and participation does not impact your treatment within the MUSC enterprise of MUSC Health, any employment, or academic record at the institution.
- Participation for youth under age 18 requires parental/legal guardian consent. Parents/legal guardians will not be informed about their child's substance use as it pertains to their participation in the study unless there are immediate safety issues.
- Research participants will receive applicable individual counseling and study medication at no cost.
- Payment is provided for participation.

CANNABIS

What is Cannabis (Marijuana)?

The term cannabis refers to the dried leaves and flowers of the Cannabis sativa or Cannabis indica plant. Cannabis can be smoked, vaporized, or ingested. Cannabis contains hundreds of chemicals, including dozens of cannabinoids. The "high" that people experience when using cannabis is caused by the cannabinoid delta-9-tetrahydrocannabinol (THC). The amount of THC in cannabis has increased substantially in recent years.

While many people have brief and mild experiences with cannabis, about 1 in 11 adults and about 1 in 6 teenagers who try cannabis become addicted to it. Young people who use cannabis regularly may have a particularly difficult time cutting back or quitting.

Is Cannabis a Medicine?

Some ingredients in cannabis, when given under close medical supervision, may have beneficial effects for a select number of serious conditions. However, recreational cannabis use in otherwise healthy young people is known to have negative effects.

Cannabis and the Brain

Adolescence is a critical period of brain development that lasts into the mid-20s. Using cannabis can negatively affect learning, memory, coordination, and judgment. Long-term use, particularly during adolescence, is associated with learning and memory problems, as well as negative mental health outcomes.

What do we know about treatment?

Treatment for cannabis use disorder has been shown to help with cutting back or quitting. However, many young people who receive treatment are unsuccessful. Our team showed in a previous study that N-acetylcysteine (NAC), when added to an intensive behavioral treatment, more than doubled the odds of treatment success. NAC is an over-the-counter supplement and antioxidant approved by the Food and Drug Administration (FDA) for use in adults and children for other conditions, but it has not been approved by the FDA for treatment of cannabis use disorder.

CANNABIS STUDIES

Cannabis Use in Adolescents' Natural Environments

Observational/Non-treatment Study

The purpose of this study is to determine responses to stress and cravings among adolescent cannabis users. Adolescents who regularly use cannabis will record their cannabis use in real-time via a mobile app for two weeks as well as complete other surveys in response to seeing photographs or images. Participation in the study will include 3-4 office visits over a period of 2 weeks. Youth ages 18-21 are able to participate in this study.

NAC for Youth Cannabis Use

Treatment Study

The purpose of this research study is to determine if the over-the-counter supplement N-acetylcysteine (NAC), when combined with weekly counseling, is effective in helping young people (age 14-21) cut back or quit using cannabis. The study includes 16 visits over 6 months (initial assessment, weekly treatment visits for 12 weeks, and occasional visits for follow-up afterward). Each visit includes direct contact with a medical clinician.

ALCOHOL

Underage Drinking

Alcohol is the most widely used substance by teens. By their senior year of high school, 62% of youth reported alcohol use. While not every child who uses alcohol develops an alcohol use disorder (AUD), alcohol is a major factor in youth health outcomes. According to the Centers for Disease Control, on average, alcohol is a factor in the deaths of 4,358 young people under the age of 21 each year and 6% of youth under age 18 meet the criteria for an Alcohol Use Disorder.

Why does my child drink?

Many factors can play a role in your child's use of alcohol such as peer pressure, stress, and a desire for increased independence. Adolescence is naturally a time of experimentation. Alcohol is also more readily available to youth today and they are surrounded with images of drinking behaviors on TV, movies, gaming, and in music.

Warning signs of underage drinking

According to the National Institute of Alcohol Abuse and Alcoholism, the top 4 warning signs of underage drinking include but are not limited to: changes in mood, including anger and irritability; academic and/or behavioral changes; changing groups of friends; and less interest in activities and/or care in appearance or low energy.

Alcohol and the Brain

Adolescence is a critical period of brain development that lasts into the mid-20s. Using alcohol can negatively affect learning, memory, coordination, and judgment. Research has shown that drinking during adolescence can lead to other negative and risky behaviors like other drug use and can increase the likelihood of long-term alcohol-related problems in adulthood.

What do we know about treatment?

Treatment for alcohol use disorder has been shown to help with cutting back or quitting. However, many young people who receive treatment are unsuccessful. Our team showed in previous studies that the over-the-counter supplement N-acetylcysteine (NAC), may help with reducing problematic substance use, including alcohol. NAC is an over-the-counter supplement and antioxidant approved by the Food and Drug Administration (FDA) for use in adults and children for other conditions, but it has not been approved by the FDA for treatment of alcohol use disorder.

ALCOHOL STUDIES

Understanding Adolescent Alcohol Use

Observational/Non-treatment Study

The purpose of this study is to evaluate how the over-the-counter supplement N-acetylcysteine (NAC) affects the brain in adolescents who may or may not use alcohol. This study requires 5 visits over the course of approximately 31 days. This study involves Magnetic Resonance Imaging (MRI) which is a technique that uses a magnetic field to create pictures of the brain. MRI does not involve radiation, injections, or dyes and is safe and non-invasive. Youth ages 15-19 are able to participate in this study.

NAC for Youth Alcohol Use

Treatment Study

The purpose of this study is to determine if the over-the-counter supplement N-acetylcysteine (NAC), when combined with weekly counseling, is effective in helping young people (age 13-20) reduce or stop using alcohol. The study includes 12 visits over 6 months (initial assessment, weekly treatment visits for 8 weeks, and occasional visits for follow-up afterward). Each visit includes direct contact with a medical clinician.