



Adolescent Brain Development: Unlocking the Potential of Georgia's Youth

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► Background

The adolescent brain undergoes significant development throughout the teen years and reaches its adult weight around age 14. The frontal lobe does not fully develop until adulthood. This adolescent developmental period marks a time when young people display rapid increases in both physical and mental capabilities. As their brains mature, their reaction time and reasoning abilities increase significantly.¹

Adolescents lack the decision-making abilities of adults, and may not gain full reasoning abilities until age 25 or even 30. This is because throughout adolescence and into adulthood the brain is experiencing two key processes, myelination of the frontal lobe and synaptic pruning, important to executive functioning such as planning, reasoning, and decision-making skills and greater self-discipline. During myelination, a fatty layer of myelin forms around the axon of a neuron to aid nerve cells in transmitting information faster and to allow for more complex brain processes. Synaptic pruning strengthens important neural connections and weeds out infrequently used connections.

The lack of fully developed reasoning powers places youth at risk during teen years as they flex their strength and independence while they are still developing impulse control and self-discipline. Since most adolescent deaths are not related to disease or physical degeneration, these difficulties in controlling behavior and emotion likely explain the 300-percent increase in teen morbidity and mortality rates.² Among youth, the primary causes of death are accidents, suicide, homicide, depression, alcohol and substance abuse, violence, reckless behaviors, eating disorders, and health problems related to risky sexual behaviors.³ Even when injury or death doesn't occur, taking risks with substances like alcohol and illegal drugs puts adolescents at increased risk compared with adults, because adolescents' brains are still developing.⁴

Furthermore, mental health problems are associated with the use of illicit substances, with effects ranging from depression and anxiety to mood disturbances and developmental delays. The adolescent brain is more prone to risk-taking because it is not fully developed, but this same lack of development makes adolescent brains especially vulnerable to the effects of risk-taking behavior.

This vulnerable adolescent period calls for access to affordable, culturally competent mental health services. In 2011 alone, 604 Georgia children and teens died from homicide, suicide, or accident, while 52,000 Georgia teens abused drugs and alcohol, or both. More than 2,000 Georgia youth are residing in juvenile detention and correctional facilities.⁵ A greater proportion of children under age 18 are living in poverty in Georgia compared with other states, and according to the Office of Adolescent Health, Georgia teens are more likely to attempt suicide and to report feeling sad or hopeless than the national average. Georgia's youth are also less likely to exhibit positive social skills than adolescents nationally. Because the mental health of all Georgians is vital to the strength, safety, and prosperity of our communities and state, these staggering numbers highlight the need and opportunity to increase teens' access to quality mental healthcare.

► State Policies and Programs

Georgia has policies and programs in place to promote safe behaviors among youth. State law prohibits drivers under age 18 from any cellular phone use while driving, including hands-free devices. All Georgia drivers, regardless of age, are banned from texting while driving, and state law requires all minors over age 8 to be restrained by a seatbelt while in a moving vehicle.



Teen drivers, ages 15 to 18, face hour limits and passenger restrictions following the issuance of their intermediate Class D license.

For the first six months, only immediate family members may ride with the teen. Then for up to one year after issuance, the law restricts teens to only one non-family passenger under age 21 and prohibits them from driving between the hours of midnight and 6 a.m.

“With the passage of a new Children’s Code in May, Georgia is emphasizing a common-sense approach to children’s issues.

By recognizing that youth are fundamentally different than adults, a renewed focus has been placed on implementing evidence-based policies that provide treatment to youth and their families and seek to improve behavior and emotional functioning. These evidence-based alternative programs and practices are supported by rigorous outcome evaluation, that clearly demonstrate effectiveness. Through this practical approach to solving our communities’ problems, we can decrease crime and enhance public safety. In support of the juvenile reform efforts, the General Assembly and Governor Deal have made available \$6M for local projects employing evidence-based, community interventions proven to reduce juvenile recidivism. With its renewed emphasis on strengthening families, Georgia’s



Children’s Code represents a belief in the capacity of our children for positive change. This responsible, local approach to criminal justice will make our state safer and help all Georgians.”

Several Georgia projects focus on reducing and preventing risky behaviors in teens, using evidence-based practices at the community level.⁶

Recommendations to Support Healthy Adolescent Brain Development

- Support practices that promote access of low-income youth and their families to effective programs and services that recognize and treat depression, substance abuse, and other major health- and mental health-related illnesses.
- Offer quality community and school-based youth development programs and services that focus on life options, skill-building, community service, and promote a sense of responsibility and accountability.
- Intensify efforts to educate both teens and adults in communities where high rates of adolescents are engaged in risky and delinquent behaviors.
- Facilitate the entry of youth into effective intervention programs rather than incarcerating them.

www.bbbgeorgia.org

¹ Dahl, R. E. (2004). *Adolescent Brain Development: A Period of Vulnerabilities and Opportunities*. *Ann. N.Y. Acad. Sci.*, 1-22. Doi 10.1196/annals.1308.001

² *Ibid.*

³ Blakemore, S-J., Choudhury, S. (2006). *Development of the adolescent brain: Implications for executive function and social cognition*. Association for Child and Adolescent Mental Health, 1-17.

⁴ Murphey, David, et al. (2013). *Child Trends Adolescent Health Highlight: Use of Illicit Drugs*. <http://childtrends.org>.

⁵ *KIDS COUNT Data Book*. (2013). Baltimore, MD: Annie E. Casey Foundation.

⁶ Promising Practices Network (http://promisingpractices.net/programs_indicator.asp) and Policy for Results (<http://policyforresults.org/topics>) share effective programs and practices.