



**BRAIN INJURY
ASSOCIATION
OF NEW JERSEY**

825 Georges Road, Second Floor
North Brunswick, NJ 08902
732.745.0200

www.bianj.org

Helpline: 1-800-669-4323

No Brain Injury is
Too Mild to Ignore,
or Too Severe to
Lose Hope

Risk Taking Behaviors in Adolescents with Brain Injury

By Dr. Barbara Leech

The adolescent years represent a period of significant change, including physical, emotional and cognitive changes. From the time children are about twelve years old until they reach their early twenties, their brains mature, displaying much greater density and organization in white matter, the parts of the brain that link neurons (gray matter), and increasing the integration of different brain functions. While novelty-seeking has been traditionally viewed psychologically, that is, as teens' need to "rebel" and/or separate from their families before beginning their own lives, recent research has suggested that there is also a neurobiological component. The structure of the adolescent brain becomes more refined over time, with risk-taking providing one basis for cognitive growth and adaptability. The incidence of thrill seeking and even reckless behaviors can increase even more markedly, however, in teens who have sustained a traumatic brain injury.

Injury to the brain's frontal lobes typically results in problems with executive functions, skills which allow an individual to regulate thinking and behavior. While there are many types of executive skills, injury-related weaknesses in emotional control, problem-solving, judgment, and impulsivity make it more likely that an adolescent would engage in behaviors or activities which would present a risk to self or others.

While many parents report that their teen children are moody or express their feelings with an intensity which appears only inconsistently related to the actual problem, teens with brain injury may be even more volatile. For example, experiencing minor frustration could cause an injured teen to go "from 0 to 60" in seconds and result not only in his screaming but also punching, throwing objects, kicking holes in walls, or the like. These explosive episodes can subside just as suddenly, leaving both the child and family confused as to what happened and why.

Weaknesses in problem-solving can make it difficult for an adolescent with brain injury to see the "big picture" in problem situations. Instead, the focus falls only on the individual details he or she sees, whether correctly or incorrectly.

Impulsive decision-making then can compound the problem - and the risk. In one instance, a teen, who found herself locked out while her parents were away, decided to break a window rather than ask the neighbors for a key. She then impulsively jumped out the second-story window when the police responded to the alarm. While this is an unusual example, other teens with



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brain injury do have trouble reviewing their response choices for both effectiveness and safety before they act.

After brain injury, individuals may demonstrate changes in personality and behavior which interfere with their relationships with family and friends. This presents a significant problem for teens, as finding a place in their peer group is a major developmental task. Teens may lose touch with (or be ostracized by) their friends, so they seek new relationships with other teens who exhibit reckless behavior. In other cases, the drive to “fit in” could lead to making inappropriate decisions, such as drinking or using drugs, showing off with reckless driving, etc. Such choices can have some immediate, apparently positive effects (e.g., feeling more relaxed or happy when using drugs), however, these also increase the likelihood of additional problems, such as drug dependence, legal consequences, or other injury to self or others.

Supports for adolescents with brain injury related executive dysfunction can include individual and/or family counseling with a professional with experience with pediatric brain injury, behavior management programs, mentoring, structured skills groups, medications, etc. The goals of such treatment should always, though, be directed toward helping the teen compensate for these deficits while still allowing for the normal behavior of adolescents. With such an approach, teens with brain injury can move on to adulthood with as much success as possible.

For more information about professionals who can address behavioral issues in children & adolescents with brain injury contact the Brain Injury Association of New Jersey’s Helpline at 1-800-669-4323, 732-745-0200 or info@bianj.org.

Dr. Barbara Leech is an adult and pediatric neuropsychologist in private practice in both New Jersey and Pennsylvania.