

# Middle School Guidance



## Effects of Nicotine on the Teen Brain

May 2015

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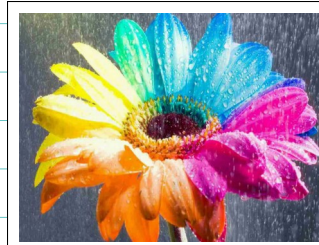
The C.D.C. and Prevention recently released a study that showed adolescent e-cigarette use tripled between 2013 - 2014. The new trend means we need to look not just at the negative health effects of smoking but also at the overall negative health effects of nicotine on the developing teenage brain. As with alcohol and other substances, nicotine has an especially harmful effect on the teenage brain. Research has shown that nicotine directly impacts monoamine neurotransmitters and the limbic system, parts of the brain for emotion regulation, behavior and memory. Neural connections are still being determined in adolescence, so the development of these areas could be compromised by the use of nicotine products. Monoamine transmitters are made up of transmitters, such as dopamine, serotonin, and epinephrine, all of which are integral to mood. In the jour-

nal article, "The Dynamic Effects of Nicotine on the Developing Brain," Dwyer and McQuown findings suggest that adolescent nicotine exposure may induce maladaptive learning in emotional contexts, which may lead to life-long mood disorders. An imbalance of any of the monoamine transmitters can result in not only mood disorders, such as depression or bipolar disorder, but even schizophrenia. Studies show that teens are more sensitive than adults to nicotine's addictive properties because the reward center of adolescent brain develops at a quicker rate than the prefrontal cortex. In other words, teens are more likely to take a risk and seek reward, which means they are also more susceptible to negative peer influence. It is essential that we correct any misperceptions teens have about e-cigarettes by educating

them as to the negative health consequences of nicotine. Candy-flavored nicotine products are no less harmful than cigarettes, contrary to what teens may think. Well-informed teens are better equipped to make responsible decisions, resist negative peer influence, and stay free from nicotine addiction. (Discovery Education, Too Good Mendez Foundation 2015)

### Quote of the month

"Don't be upset by the results you didn't get with the work you didn't do."



### May Flowers

### Points of Interest:

- ✓ - Absent from school? Check out the teacher lesson plans by logging into PowerSchool parent portal.
- ✓ - Excuses are due the day students return to school. A grace period of three days is allowed before becoming illegal.
- ✓ - Bullying information can be found at: [www.bbsd.com/Page/16088](http://www.bbsd.com/Page/16088)

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## Important Upcoming Events

The following are a listing of important dates to remember:

**May 10, 2015** - Happy Mother's Day! Thanks mom! I love you!

**May 13, 2015 - May 20, 2015** - Keystone Exam (Algebra 1) testing window. Eighth grade Algebra 1 class

only!

**May 28, 2015** - (1:00) Middle School Awards Day.

**May 28, 2015** - N.J.H.S. Induction Program (6:30).

**June 2, 2015** - Last student day of the 2014 - 2015 school year.

**June 14, 2015** - Flag Day! Display the colors proudly!

**June 21, 2015** - Happy Father's Day. Thanks dad! I love you!

**July 4, 2015** - Happy Independence Day America!

**August 28, 2015** - Teacher In-Service Day.

**August 31, 2015** - Teacher In-Service Day.

