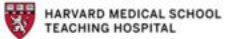



The Science of Addiction in Adolescents

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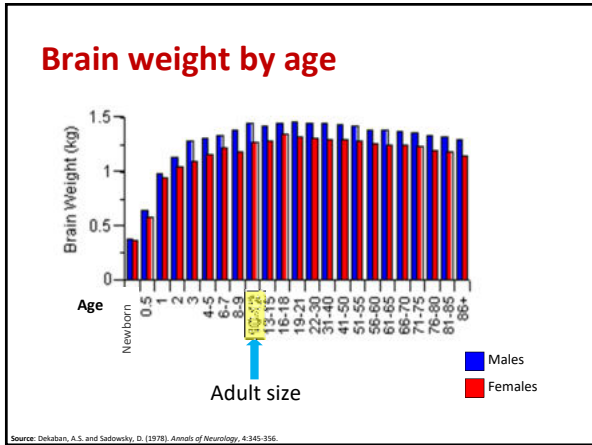


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Disclosures

Sharon Levy has no financial relationships to disclose or Conflicts of Interest (COIs) to resolve.

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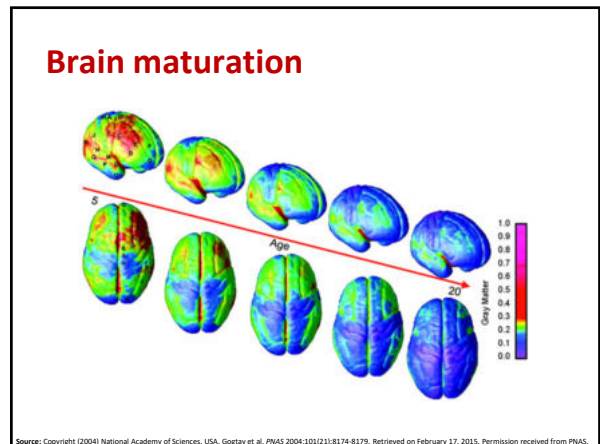
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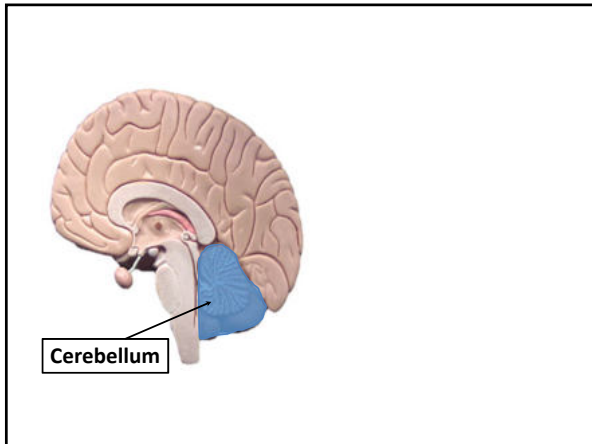
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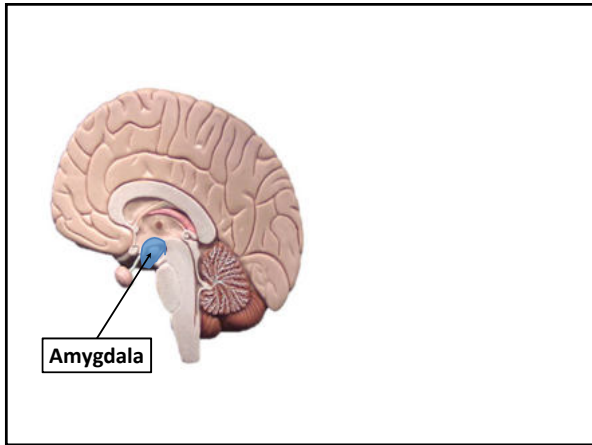
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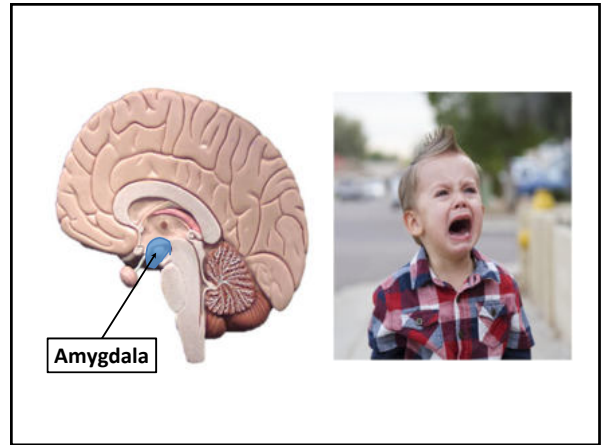
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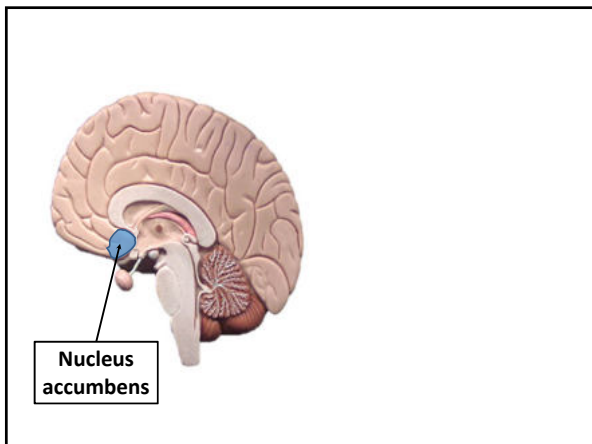
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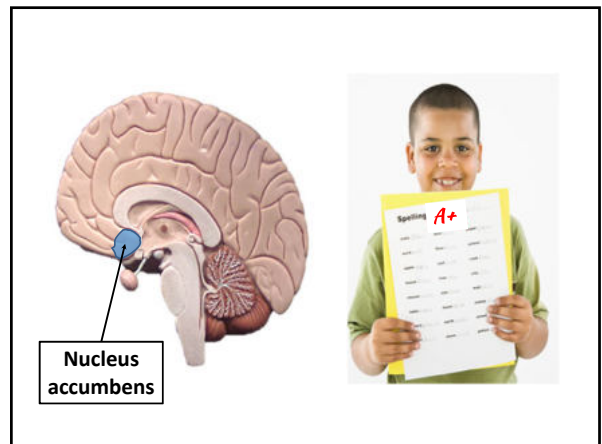
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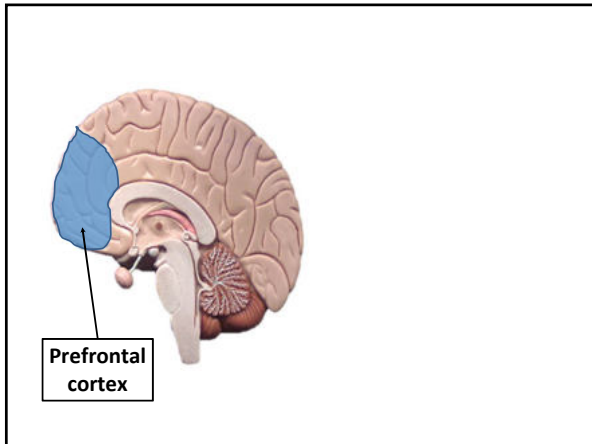
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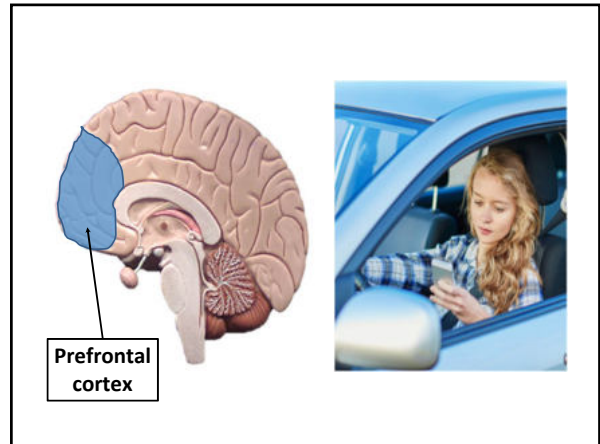
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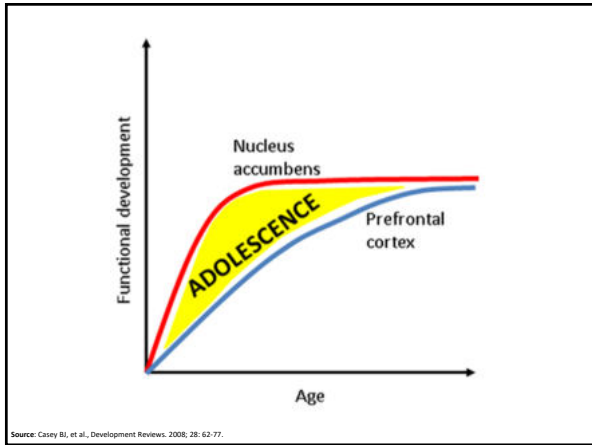
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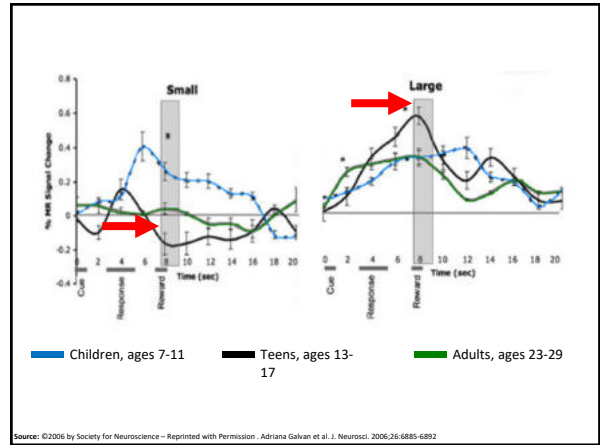
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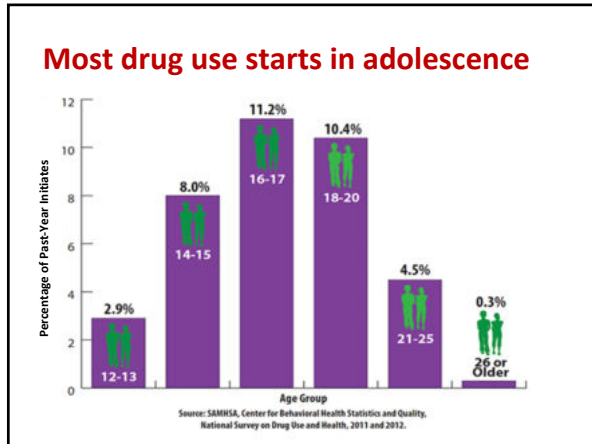
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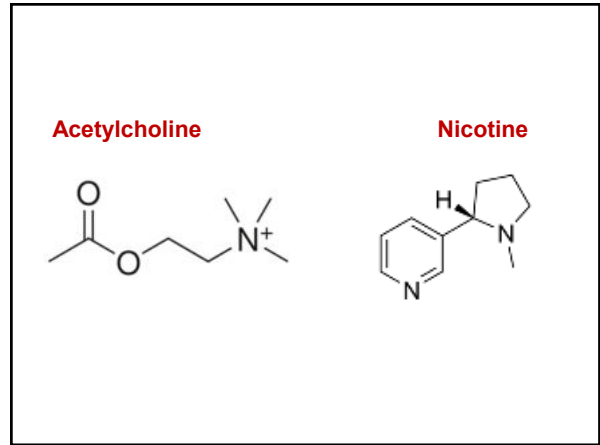
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Adolescents are **developmentally vulnerable** to develop substance use disorders

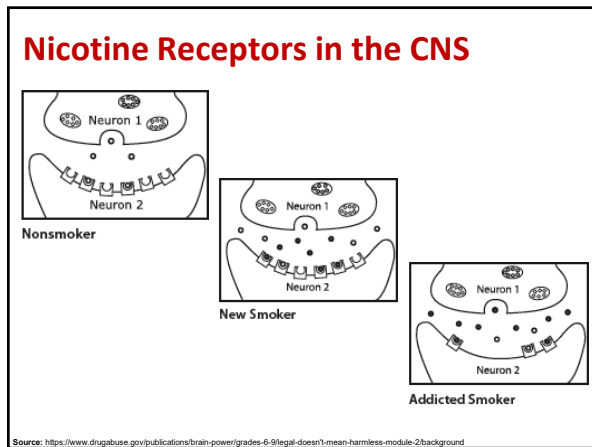
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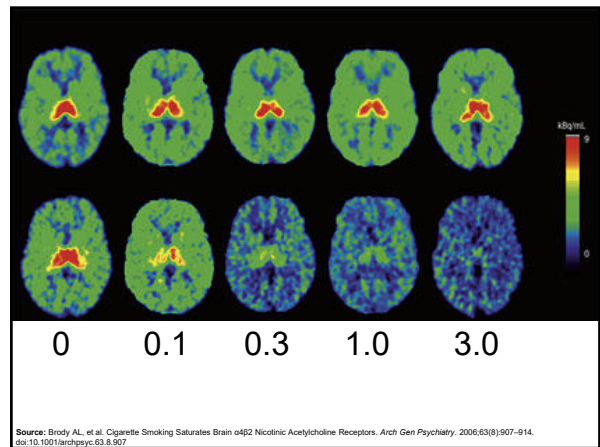
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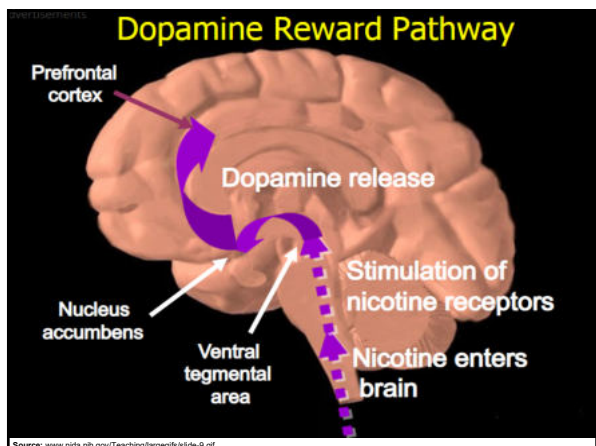
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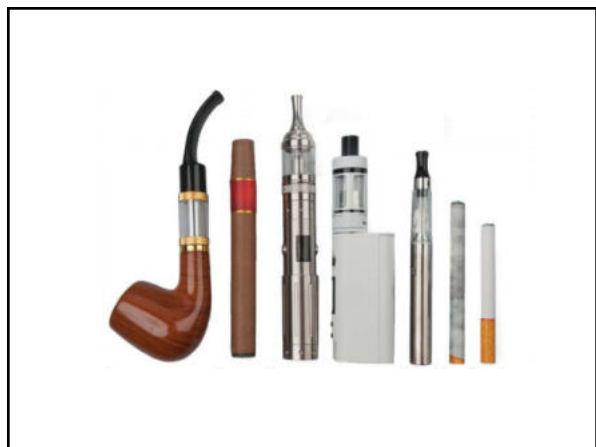
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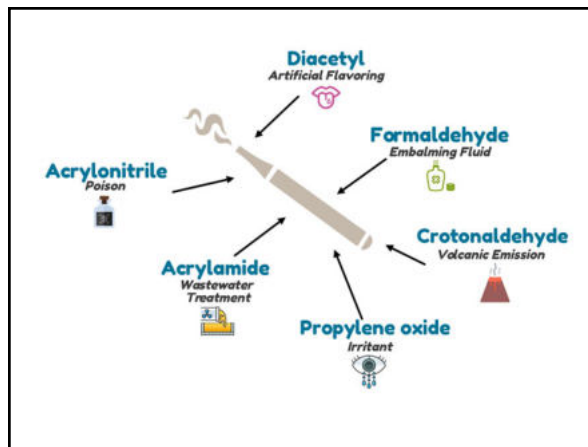
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Vaping Dictionary

- Nicked
- French inhale
- Ghosting
- Stacking
- Blinking
- Nic sick

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“When I first used I would get a buzz and my entire body would feel tingly. My eyes would water up. I would feel as if I had been spinning around and just stopped. It felt great. I don't feel those things anymore.”

14 year old boy describing nicotine effects

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Nicotine Toxicity



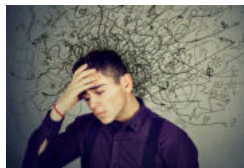
Stomach pain



Dizziness



Headaches



Decreased Concentration

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Austin

- 16 year old boy; highly functioning through 8th grade
- Fall of 9th grade starts vaping
- Quickly increases to daily use, reports one pod per week plus hits from friend's Juul® at school
- Functioning falls dramatically. Irritable at home. He reports new attention problems and asks if he has ADHD.
- Parents discover Juul® and insist he quit. DT's negative for 2 weeks, appears to have withdrawal symptoms. Restarts after 2 weeks.
- SUD evaluation:
 - He endorses criteria for mild nicotine use disorder though parental observation suggests more severe NUD.
 - No other substance use reported by Austin or parents,
 - Does not meet criteria for any mental health disorder
- Parents transfer to boarding school for 10th grade to change milieu though use continues

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Jack

- 14 year old boy, started using Juul® at age 13
- Caught by parents after 9 months; forced to quit over the summer
- Restarted in the Fall. Presents for SUD treatment asking for help, "all I can think about is nicotine"
- "I don't feel right since I quit. I frequently "zone out" and have to pull myself back. This happens a lot, even when I am playing sports."
- Meets criteria for severe NUD, no other substance use, no mental health disorders

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Summary

- Adolescents are vulnerable to both *drug use* and *addiction*
- New vaping products are interesting to teens who are particularly attracted to tricks
- Vaping products deliver high doses of nicotine in short amounts of time. Many teens experience symptoms of nicotine toxicity
- The long term consequences of this exposure are unknown

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