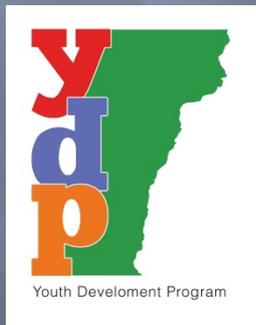


Kreig Pinkham: Executive Director, Washington County Youth Service Bureau



- Family reunification/runaway prevention
- Homeless youth services
- Teen center/drop-in
- Residential programming for formerly incarcerated youth
- Supports for youth transitioning from foster care
- Adolescent/young adult substance treatment services



A whirlwind tour of the adolescent brain

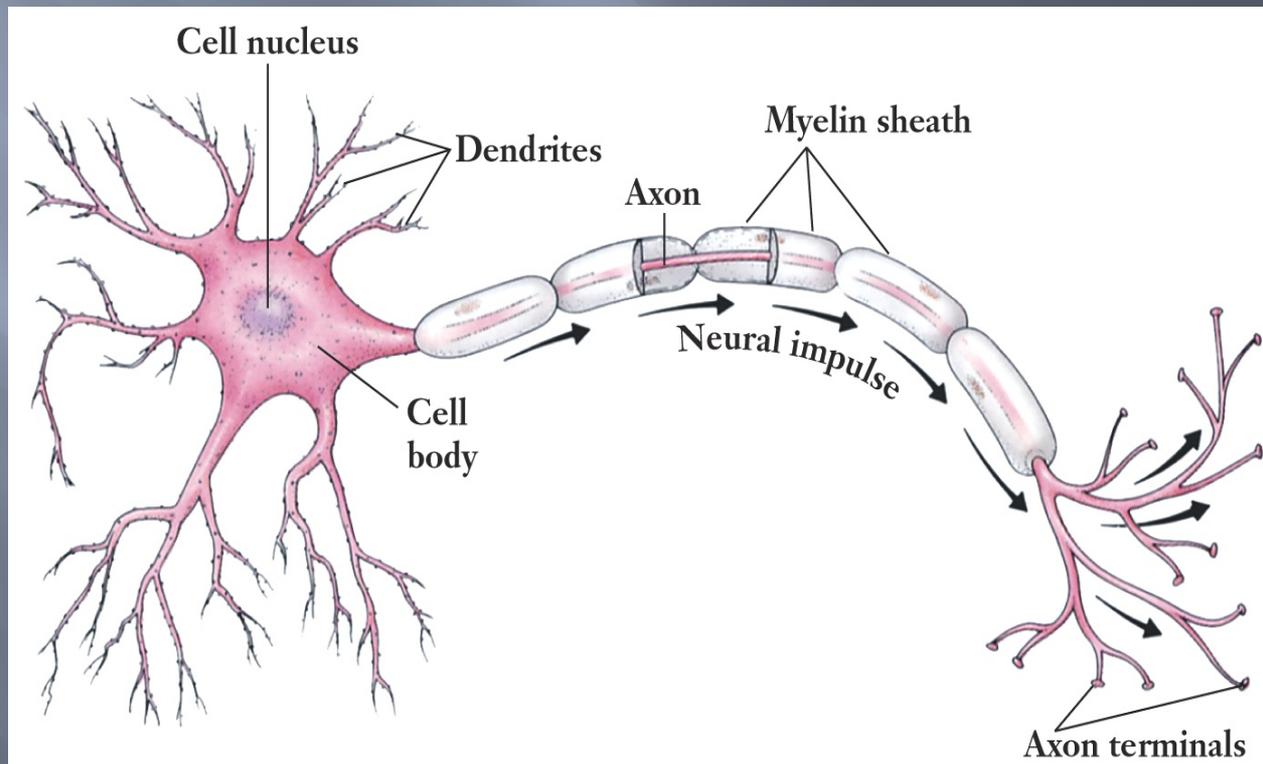


Key concepts

- ▣ Adolescence is a time of significant change within the brain and represents the longest period of sustained neural development during an individual's lifespan.
- ▣ Significant brain development spans a period of time that begins with the onset of puberty at approximately age 9 and extends through the mid to late 20's.
- ▣ It's a period of time of increased sensitivity to both positive and negative developmental factors.

The basic mechanics

- ▣ New cells aren't being added, the cells that were developed during early childhood are being fine-tuned to operate at peak efficiency.



The basic mechanics

- ▣ Development happens from the inside/bottom to the outside/top:
 1. Brain stem/basic functions
 2. Limbic system/emotional regulation, short/long term memory
 3. Corpus Callosum/Right & Left hemisphere coordination, which figures largely into social skills and placement of self-identity within community.
 4. Prefrontal cortex/Long-term planning, higher level thinking, the ability to plan for action & consequence.

The basic mechanics

- ▣ The brain is benefited during this period by amassing a variety of different experiences that are translated to memory centers to inform future behavior patterns and roadmaps for successful adulthood.
- ▣ RISK IS GOOD for the developing brain



How does Marijuana factor in?

- The real problem with pot may be that it neutralizes nature's developmental tools to encourage learning.
- THC blocks the receptor sites of neurotransmitters like anandamide which are linked to emotion and mood regulation, learning and the joy felt when experiencing something new.
- Marijuana also seems to inhibit function in areas of the cortex that play a role self reflection and the capacity to learn from mistakes.
- THC blocks similar receptor sights in other parts of the brain including the motor cortex.

VT Youth Risk Behavior Survey

- ▣ What is the YRBS?
 - A survey taken by all VT High-school and Middle-School students that measures a variety of risk and protective factors.
 - It's conducted every other year and allows for an analysis of changing behaviors.
 - It consists of a High School Survey and a slightly abbreviated survey for Middle School students.
 - It does not cover youth who are out of school or not in school on the day the survey is administered.
 - It offers data about behavior, but cannot explain that behavior.

What light does the 2015 YRBS shed on the subject of legalization?

- ▣ Alcohol remains the primary substance of choice for VT teens.
- ▣ Use of substances, and other risk factors, tends to increase as youth age.
- ▣ Youth, particularly high-school youth, tend to perceive that substances – including currently regulated substances are fairly easy to obtain.
- ▣ Not all youth use.

Among VT High School Students

- ▣ 56% report ever having consumed alcohol; 21% report ever having smoked a whole cigarette; 37% report having ever used marijuana.
- ▣ In the 30 days prior to the survey 30% report drinking; 11% reported smoking; 22% reported marijuana use.

Dosage among high-school students

- ▣ Among those who reported drinking within the last 30 days:
 - 50% reported drinking at least 1 or two days
 - 37% reported drinking on 3-9 days
 - 12% reported drinking 10 or more days.
- ▣ Among those who reported smoking within the last 30 days:
 - 29% reported smoking on 1 or 2 days
 - 37% reported smoking on 20 or more days
- ▣ Among those who reported marijuana use within the last 30 days:
 - 31% reported using 1 or 2 times
 - 24 % reported using 3-9 times
 - 45% reported using 10 or more times.

What are youth saying about use

- ▣ 4 out of 5 youth believe that use is higher than actually reported (surveyed for tobacco and marijuana)
- ▣ Peer disapproval of cigarette smoking is significantly higher than peer disapproval of alcohol or marijuana use (78% compared to 53% and 56%).
- ▣ Student's perception of parental disapproval follows a similar pattern (91% cigarette, 72% alcohol and 80% marijuana).

Some significant red flags from the 2015 YRBS

- ▣ Students see cigarettes as more harmful than either tobacco or marijuana, by a significant margin. 65% of students report perceived danger in regular cigarette use, 38% in regular alcohol use and 27% in regular marijuana use.
- ▣ Students are twice as likely to drive after using marijuana than alcohol (15% reported having done so in the past 30 days compared to 7%).
- ▣ It's important to note that when comparing the 2013 YRBS and the 2015 YRBS the perceived harm of cigarette use increased, but the perceived harm of marijuana use decreased.

What can we take from this?

▣ **WARNING – KREIG'S INTERPRETATION**

- Simply regulating a substance does not alone prevent use. Youth feel that all three substances are relatively easy to obtain.
- A moral sense of right and wrong – or even parental approval of behavior is not a perfect predictor of use.
- Youth decisions are powerfully motivated by their perceptions of social acceptance by their peers.
- We've mounted successful youth-aware campaigns to message the harms of cigarettes, similar approaches for alcohol aren't as informed and for marijuana they are all but non-existent.

Regardless of legislation we can't cite or charge our way out of this dilemma

- ▣ Juvenile Justice research nationally is clearly trending toward a recognition that youth decision making is impacted by their developing status, and that system responses to this behavior should account for that.
- ▣ Numerous studies illustrate that even minor system involvement leads to more negative outcomes than natural consequences or community-based resolutions.

Final thoughts

- ▣ Whatever decision is made we will have to develop a clear prevention strategy that focuses on community messaging and primary prevention efforts that give youth opportunities for positive risk.
- ▣ In any approach, we should work to ensure that youth don't become system involved for misdemeanor levels of use or possession.