



The Teen Scene

**Sharon Cirankewitch, Addictions Counsellor,
AHS, Youth Addictions Services**

Menu

- Identifying some Drugs and Paraphernalia found in our Community
- Alberta Teen Drug Use Stats
- Getting familiar with the Teen Brain
- Risk and Protective Factors
- Increasing Your Influence
- Resources and Support

**TRYING TO UNDERSTAND
THE BEHAVIOR OF SOME
PEOPLE IS LIKE TRYING
TO SMELL THE COLOR 9.**



Drug Paraphernalia



Soft drink can with false bottom.



Some Drugs of Choice for Teens



Cocaine



Nicotine



Marijuana



Alcohol



Ecstasy



Mushrooms



LSD/Acid

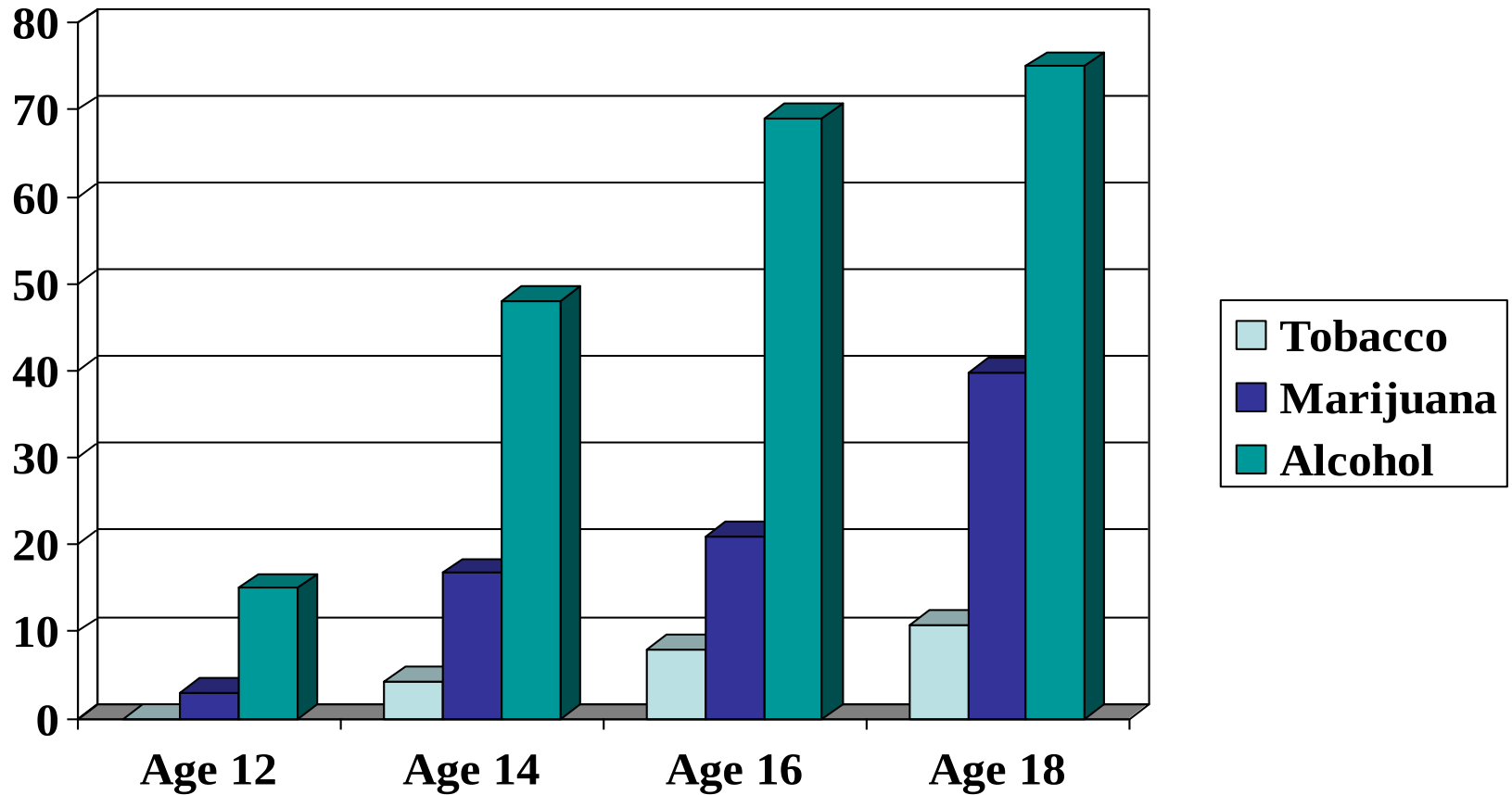
Top Substances Used by Alberta Teens (2008)



Prevalence rates among Alberta youth (Gr. 7 – 12, 2008)

Substance	Past-year use (%)
Alcohol	49.1
Cannabis	16.3
Codeine	15.5
Tobacco	4.7
Hallucinogens	4.0
MDMA or Ecstasy	3.7
Stimulants	2.3
Solvents	2.2
Cocaine	2.1
LSD	1.8
Glue	1.2

Age and drug use - 2008



**Canadian Alcohol and Drug Use Monitoring Survey (CADUMS):
Marijuana Outcomes
(Albertan's 15 – 24 years of age)**

- **Lifetime use: 35.4% reported using marijuana in their lifetime**
- **Current use: 19.4% reported using marijuana in the year prior to the survey**
- **Past Month: 10.2% disclosed using marijuana in the month prior to survey**

The Alberta Youth Experience Survey, 2008

(Alberta Health Services, Results Published 2010)

32% of High School Students have **NOT** used alcohol in the past year

68% of Jr High School Students have **NOT** used alcohol in the past year

73% of High School Students have **NOT** used marijuana in the past year

94% of Jr High School Students have **NOT** used marijuana in the past year

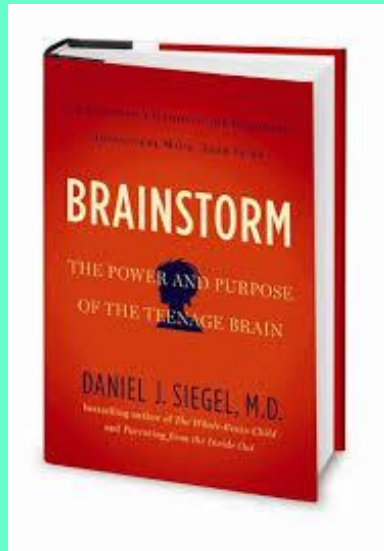
80% of High School Students have **NOT** used Codeine in the past year

90% of Jr High School Students have **NOT** used Codeine in the past year

92% of High School Students are **NOT** current cigarette smokers

98% of Jr High School Students are **NOT** current cigarette smokers

*Jr High grades 7 – 9, High School grades 10-12

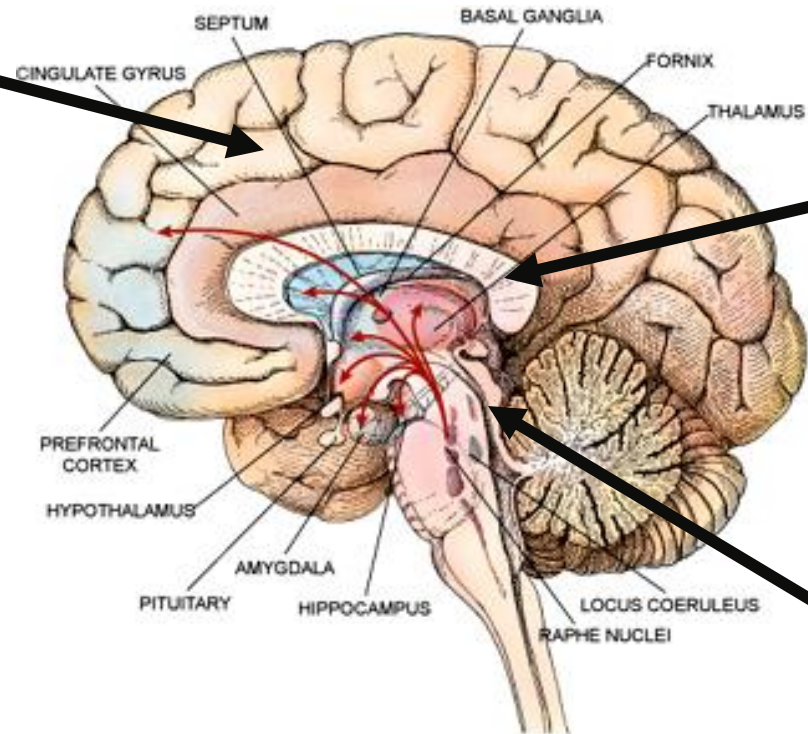


**It's about the
changes in the
brain**



Parts of the brain

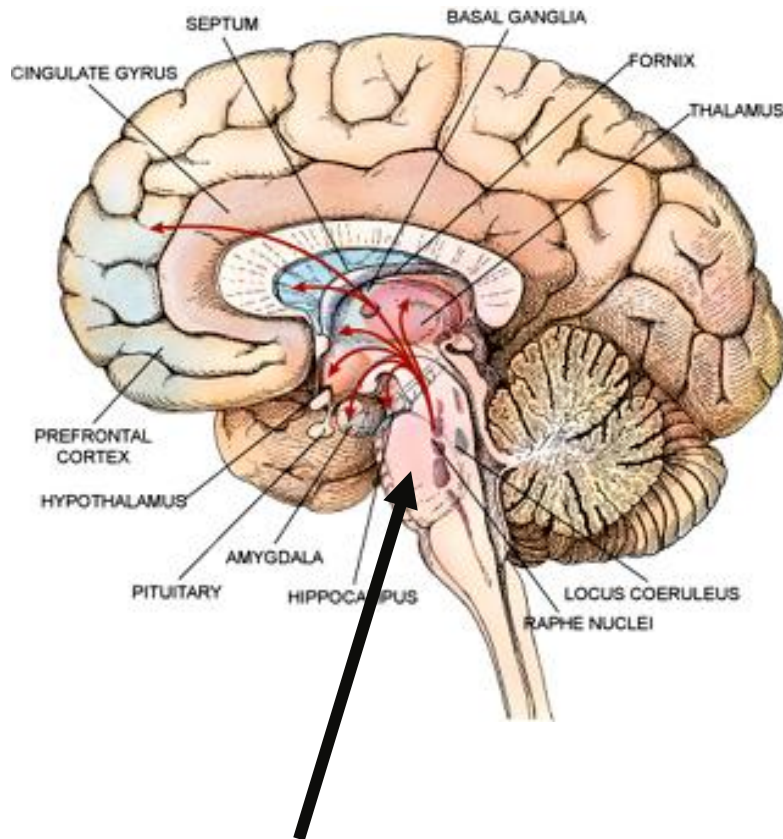
Forebrain (rational brain)



Midbrain
(mammalian
brain)

Hindbrain
(reptilian
brain)

How the brain develops



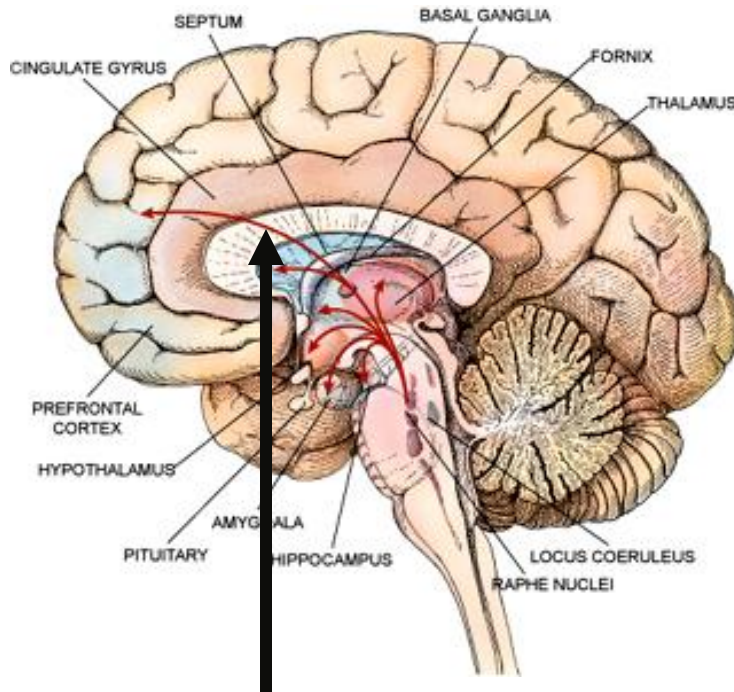
Hindbrain (reptilian brain)

The hindbrain is the deepest structure in the brain. It is the most primitive and is the brain structure that all animals have in common.

Controls all essential body functions and sustains life.

- Hunger
- Digestion
- Breathing and Heart Rate
- Temperature
- Movement and Balance
- Fight or Flight

How the brain develops



Midbrain (mammalian brain)

The midbrain is known by many names including the limbic system. Humans and all other mammals have this brain structure in common.

It houses the control centers for:

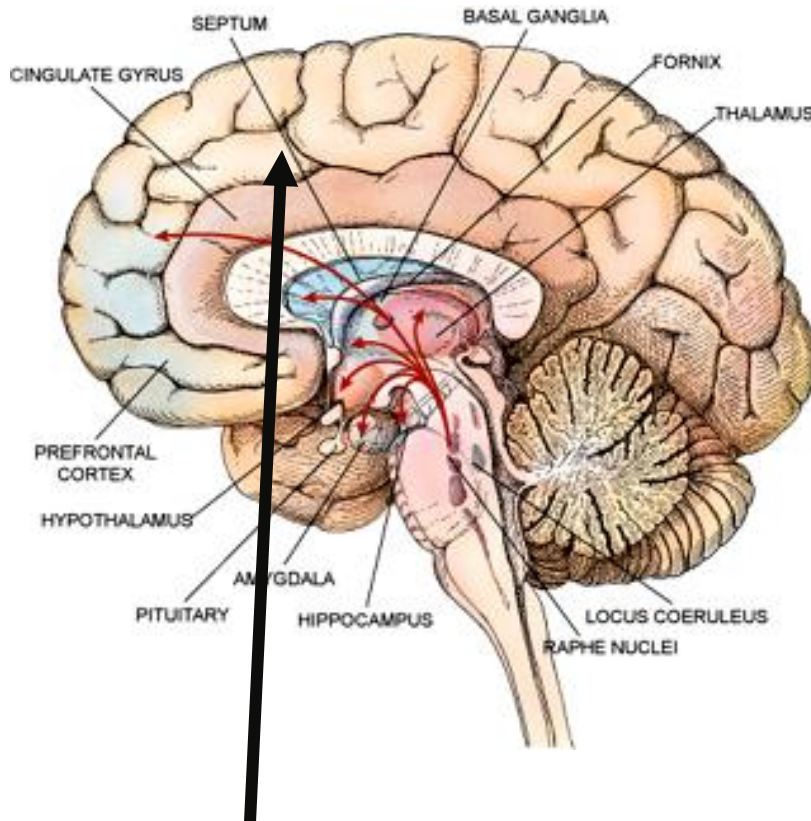
- Emotion
- Behaviour
- Motivation
- Long term memory
- Reward and Pleasure

Helps control fight or flight response and activates emotions like: rage, fear and separation anxiety, caring and nurturing, social bonding, playfulness, curiosity

How the brain develops

This is the higher brain. A.K.A the cerebral cortex. It makes up 85% of the total human brain mass and sits like a cap over the midbrain and the hind brain. The development of the forebrain is dependent on interaction with the environment. Its functions and capabilities include:

- Creativity and imagination
- Problem-solving
- Reasoning and reflection
- Self-awareness
- Kindness and empathy
- Reasoning, judgment



Forebrain (rational brain)

The forebrain helps us interpret our emotions and choose responses. It is the last part of our brain to fully develop.

- Adolescence is a period of profound brain maturation.
- We *thought* brain development was complete by adolescence
- We now know... maturation is not complete until about **age 24!!!**

INSIDE THE ADOLESCENT BRAIN

The brain undergoes two major developmental spurts, one in the womb and the second from childhood through the teen years, when the organ matures by fits and starts in a sequence that moves from the back of the brain to the front.

Nerve Proliferation ...



By age 13 for girls and 15 for boys, the neurons in the brain of the brain have formed thousands of new connections. One of the most important is the one that connects the brain to the body.

Corpus Callosum

Thought is an electrical phenomenon, and the corpus callosum, the bundle of nerve fibers that connects the left and right hemispheres of the brain, is the main highway for the brain's electrical and chemical messages. It is the brain's main highway, and it is the brain's main highway.

Prefrontal Cortex

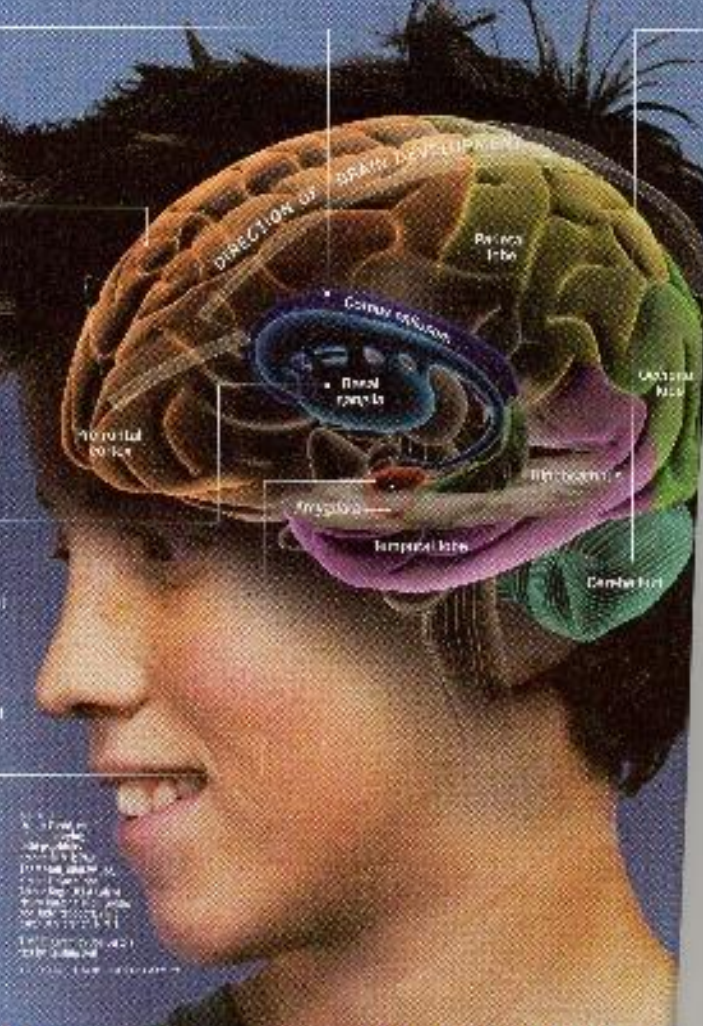
The CEO of the brain, the prefrontal cortex is the last part of the brain to mature. It is the part of the brain that is responsible for the brain's executive functions, such as planning, decision-making, and impulse control. It is the part of the brain that is responsible for the brain's executive functions, such as planning, decision-making, and impulse control.

Basal Ganglia

Larger in females than in males, this part of the brain is the brain's main control center. It is the part of the brain that is responsible for the brain's executive functions, such as planning, decision-making, and impulse control. It is the part of the brain that is responsible for the brain's executive functions, such as planning, decision-making, and impulse control.

Amygdala

The brain's emotional center, the amygdala is the part of the brain that is responsible for the brain's executive functions, such as planning, decision-making, and impulse control. It is the part of the brain that is responsible for the brain's executive functions, such as planning, decision-making, and impulse control.



Inside the Teenage Brain

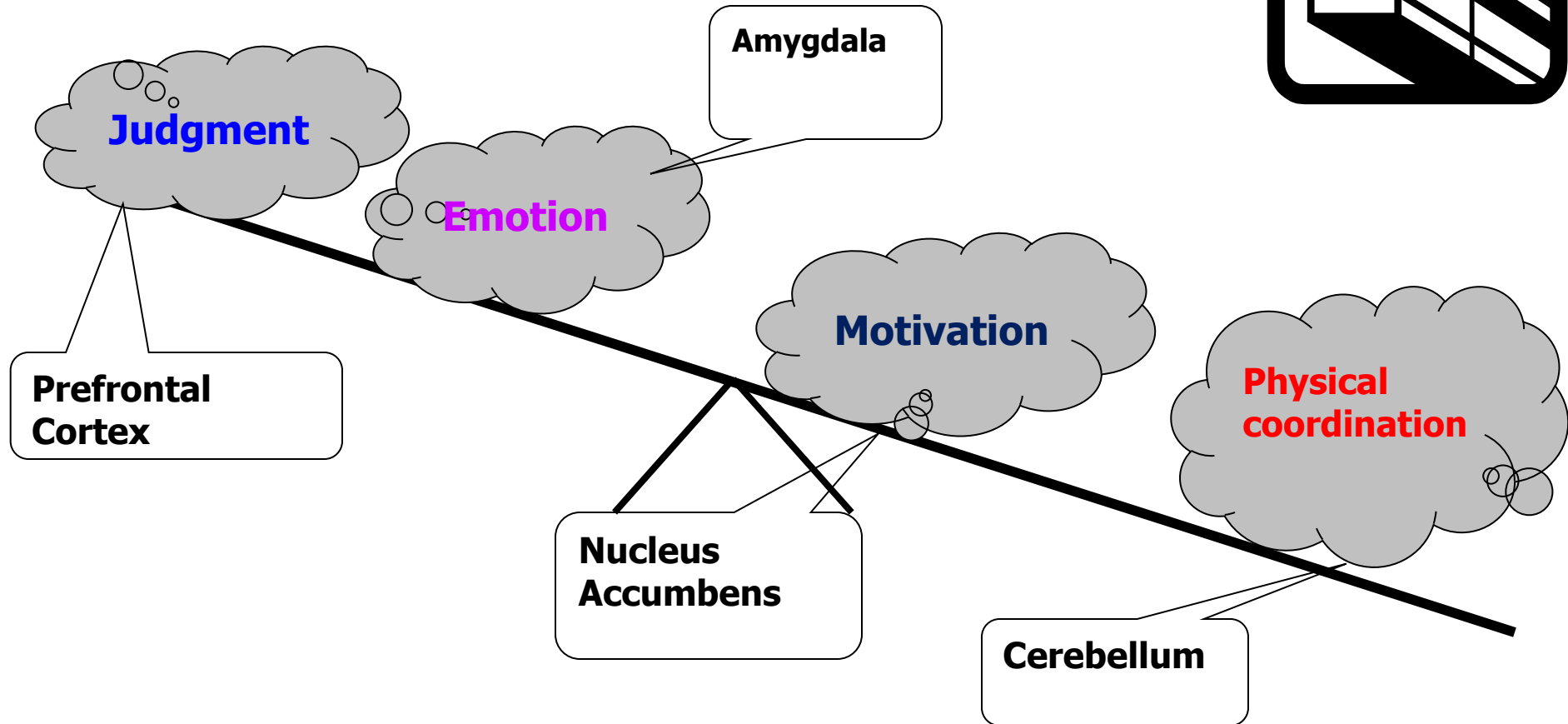
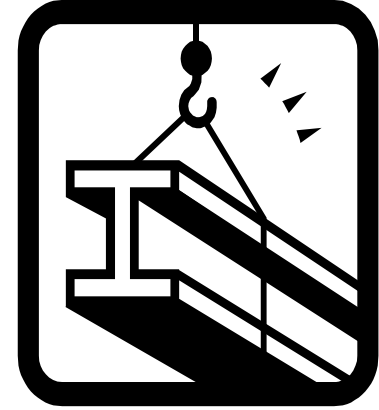
PBS Frontline: Inside the Teenage Brain

[Inside the Teenage Brain](#)

Ken Winters: The Teen Brain

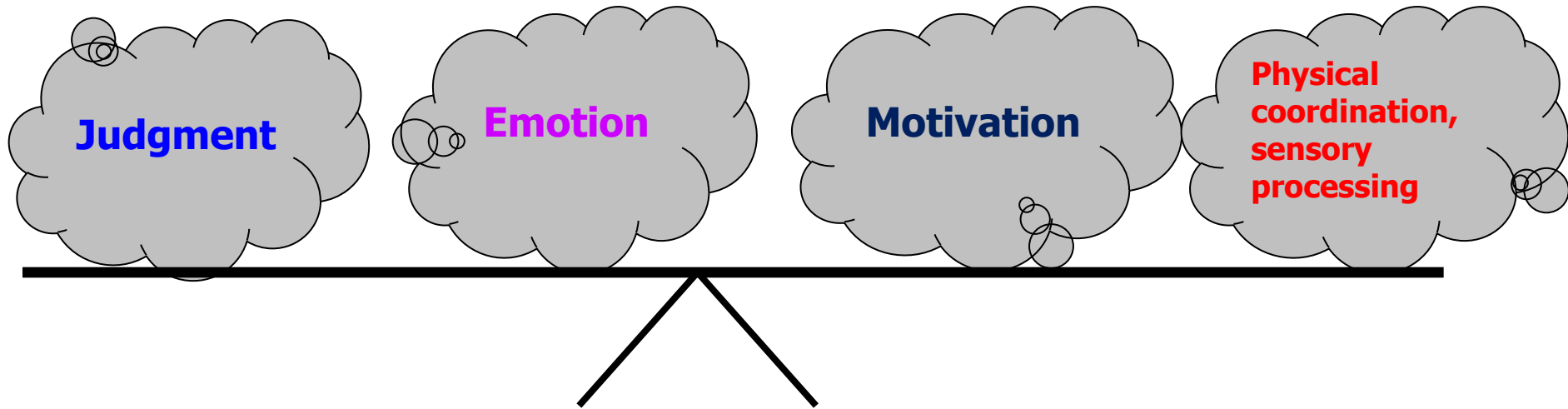
[Teen Brain video.wmv – YouTube](#)

Pruning starts at the back of the brain and moves to the front



Notice: Judgment is last to develop!

Age 24



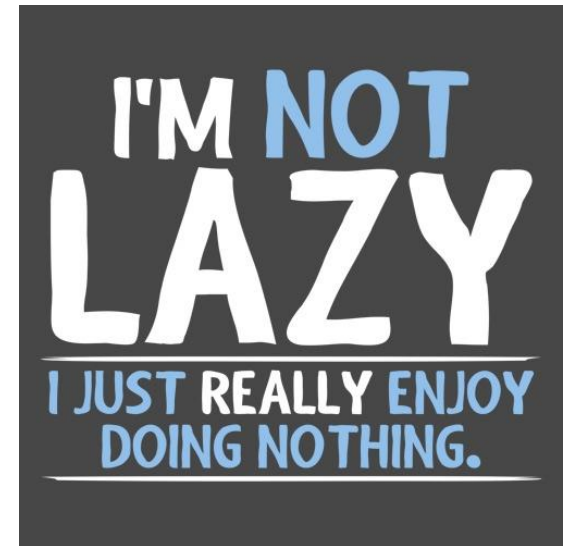
Ahh... Balance, Finally!

Increased “Reward Drive”

Teens baseline level of dopamine is lower

Impulsivity:

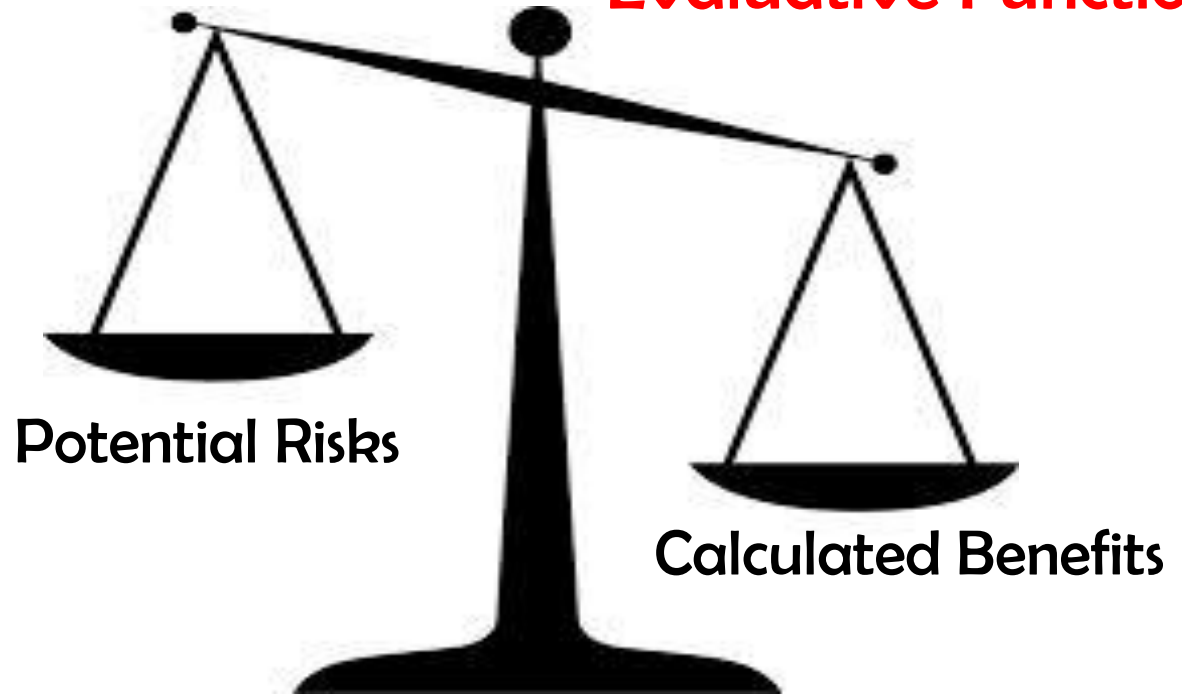
Behaviour occurs without thoughtful reflection



But its release in response to experience is higher



Evaluative Function



The scales teens use to weigh out their options are biased in favour of the positive outcome. Can be especially activated when with other teens

Hyperrationality

Examining the facts and missing the setting or context.
Often teens are fully aware of the risks but put more weight on the exciting potential benefits of their actions.

“If adults fight against these fundamental features of adolescence, it’s like fighting against the natural push of a waterfall. You cannot stop a waterfall, but you can learn to direct its course and harness its power.” Daniel Siegel MD



Resiliency

- **The ability to overcome negative life circumstances**
- **A “balance” of risk and protective factors**
- **There is evidence that protective factors in one area can compensate for a lack of these factors in another area**

Adolescent Risk Factors

Individual

- Trauma/mental health (including ADHD)
- Early initiation
- Alienation
- Temperament
- Impulsivity

School

- Academic Failure
- Disorderly & unsafe school climate
- Lack of commitment to school

Community

- Community norms that permit drug use
- Impoverished neighborhoods/high crime rates
- High transience

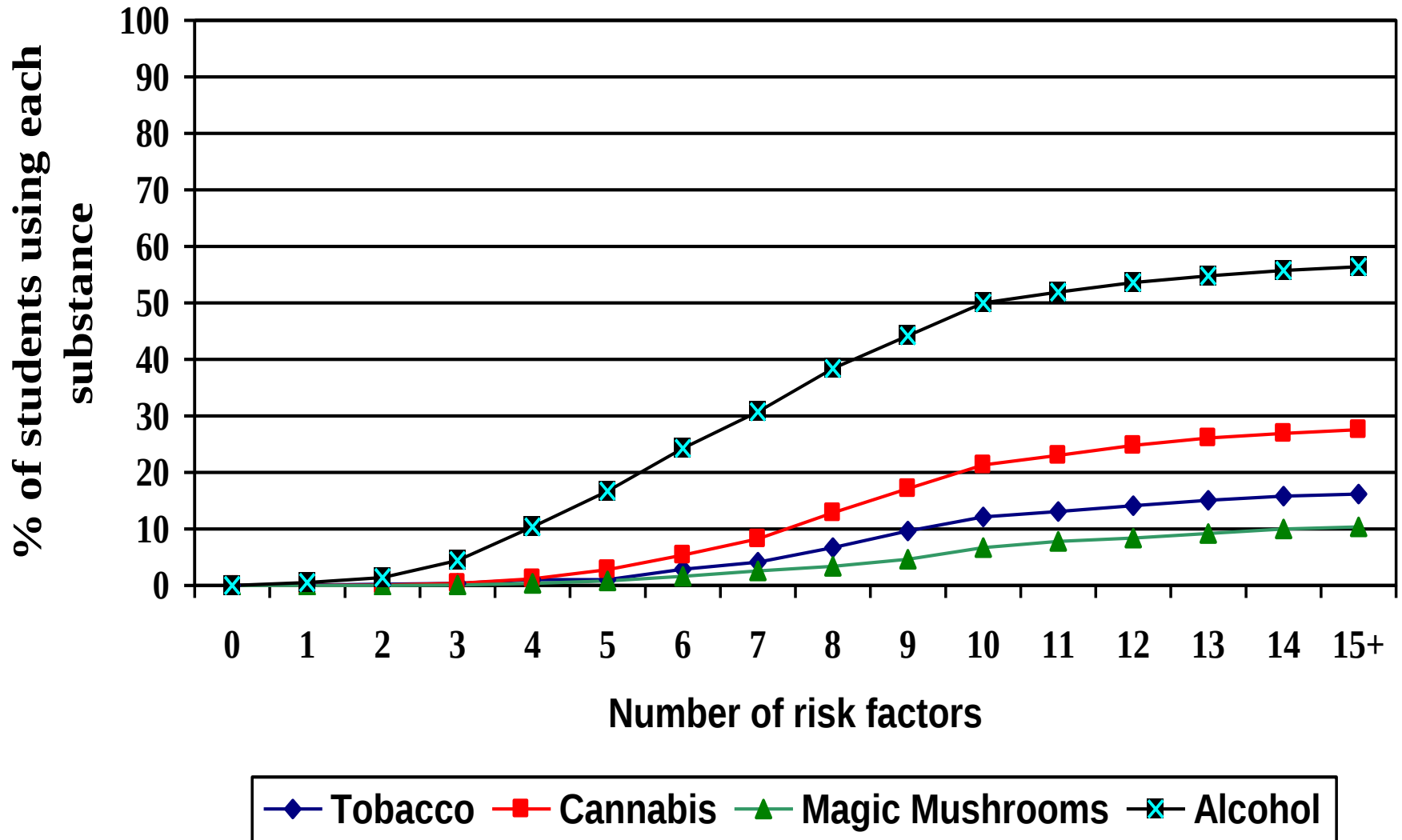
Family

- Parental or sibling behaviour/modeling
- Discord/violence/ poor relationship
- Low parental support and monitoring

Risk Factors for Substance Abuse

- Age
- Family history of substance abuse
- Peer risk behaviour
- School disconnection
- Family discord
- Grade at first use of cigarette
- Signs of leaving school early
- Grade of first use of cannabis

TAYES Research: Combined Effect of **Risk Factors**



Adolescent Protective Factors

Individual

- Social skills
- Emotional stability
- Positive self esteem
- Flexibility/problem-solving skills
- Resilience

School

- Supportive school environment
- Clear standards for behaviour
- Youth participation in school tasks

Community

- Participation in and availability of pro-social activities
- Norms of non-use
- Caring and supportive communities
- Media literacy

Family

- Emotional support & absence of severe criticism
- Support/monitoring
- High expectations/ clear rules
- A sense of basic trust

Protective Factors Against Substance Abuse: in Order of Influence

- **Parental Monitoring**
- **Social Skills**
- **Availability of pro-social activities**
- **Participation in pro-social activities**
- **School connection**
- **School marks**
- **Peer influence on decision making**
- **Positive adults in neighborhoods**

A reliable finding from prevention research is that the most significant tools in drug abuse prevention are strong parenting and strong families.

Increasing Your Influence

Parental Monitoring

Family meals

Family activities: games, walks, routines

Initiating and cultivating positive interactions with your teen

- Getting in their face and space in a friendly way
- “Collect” before you “Direct”



Increasing Your Influence

Managing Technology

computers/phones = power tools

- **25% of grade 4 students have their own cell phones**
- **Almost 40% by Grade 6**
- **2005 70% of kids had parental restrictions about sites they could visit. In 2013 only 48% said they were blocked from certain sites**
- **80% rarely or never with an adult while using the internet. Among the Grade 4 kids, 30% said usually, 45% said “rarely” and 20% said “never” (unsupervised)**

Reported in the Calgary Herald, January 22, 2014



Young Canadians in a Wired World Phase III

Young Canadians need less surveillance and more mentorship online. National study highlights the important role of adults in kids' online lives
Ottawa, ON (January 22, 2015) — A new report released by MediaSmarts, Canada's centre for digital and media literacy

Mediasmarts.ca



Life Online

Canadian students are more connected, more mobile and more social than ever.
www.mediasmarts.ca/vcww

ONLINE ACCESS

45% of students access the Internet using a cell/smart phone **60%** of boys access the Internet through a gaming console

GRADE	Overall Internet	Own Device	Parents Computer	Library or Community Center	MP3 Player	Cell / Smart Phone	Gaming Console
4	64%	17%	56%	6%	47%	12%	46%
5	59%	19%	62%	9%	49%	21%	47%
6	59%	20%	63%	6%	55%	25%	48%
7	54%	21%	69%	7%	55%	37%	45%
8	50%	23%	73%	4%	53%	56%	41%
9	41%	23%	75%	6%	44%	68%	43%
10	39%	25%	78%	6%	38%	69%	34%
11	37%	27%	73%	6%	36%	75%	38%

One quarter of students in Grade 4, half of students in Grade 7, and 85% of students in Grade 11, own their cell phone.

Zzzzz
39%

of students with cell phones sleep with them.

WITH CELL / SMART PHONE

Grade	Own
4	24%
5	31%
6	38%
7	52%
8	68%
9	83%
10	87%
11	85%

PARENTAL INVOLVEMENT

Are there rules about any of these in your house?	2005	2013
Getting together with someone you met online	74%	44%
Sites that you are not supposed to visit	70%	48%
Talking to strangers online or on your cell phone	69%	52%

22% of Grade 4 students are "never" online at home with an adult.

RULES ABOUT...

TALKING TO STRANGERS	POSTING CONTACT INFO	GETTING TOGETHER WITH SOMEONE MET ONLINE
40% 61%	44% 63%	35% 52%

89% of students agree with the statement "I know I can protect myself online".

Learning about online issues from parents and teachers (GRADES 4-6)

I learned about...	FROM MY PARENTS	FROM MY TEACHERS
... how to tell if information is true	48%	40%
... how to use privacy settings	50%	14%
... how to deal with cyberbullying	51%	58%
... how to be safe online	75%	50%
... what is legal and illegal to do online	70%	38%

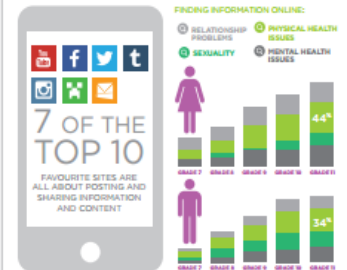
BOYS AND GIRLS HAVE DIFFERENT EXPERIENCES ONLINE

Girls are both more likely than boys to agree with the statement that they could be hurt by online strangers (82% compared to 62% of boys) and less likely to see the Internet as a safe place (51% compared to 61% of boys).

ONLINE ACTIVITIES

THE MOST FREQUENT ONLINE ACTIVITIES REPORTED BY STUDENTS ARE:

f Among grades 4-6 students, **30%** have a Facebook account and **16%** have a Twitter account in spite of the fact that anyone under the age of 13 is barred from using these sites.



IMPORTANCE OF LIFE-BALANCE WITH DIGITAL MEDIA

One third of students (35%) worry they spend too much time online. **94%** of students choose to go offline to do other things, like spend more time with friends or family, enjoy some quiet time by themselves, or go outside.

METHODOLOGY

Conducted February to June of 2013
5,436 Canadian students in grades 4-11 in 10 provinces and three territories
41% boys 46% girls 13% no indication
140 schools in 51 school boards

Increasing Your Influence

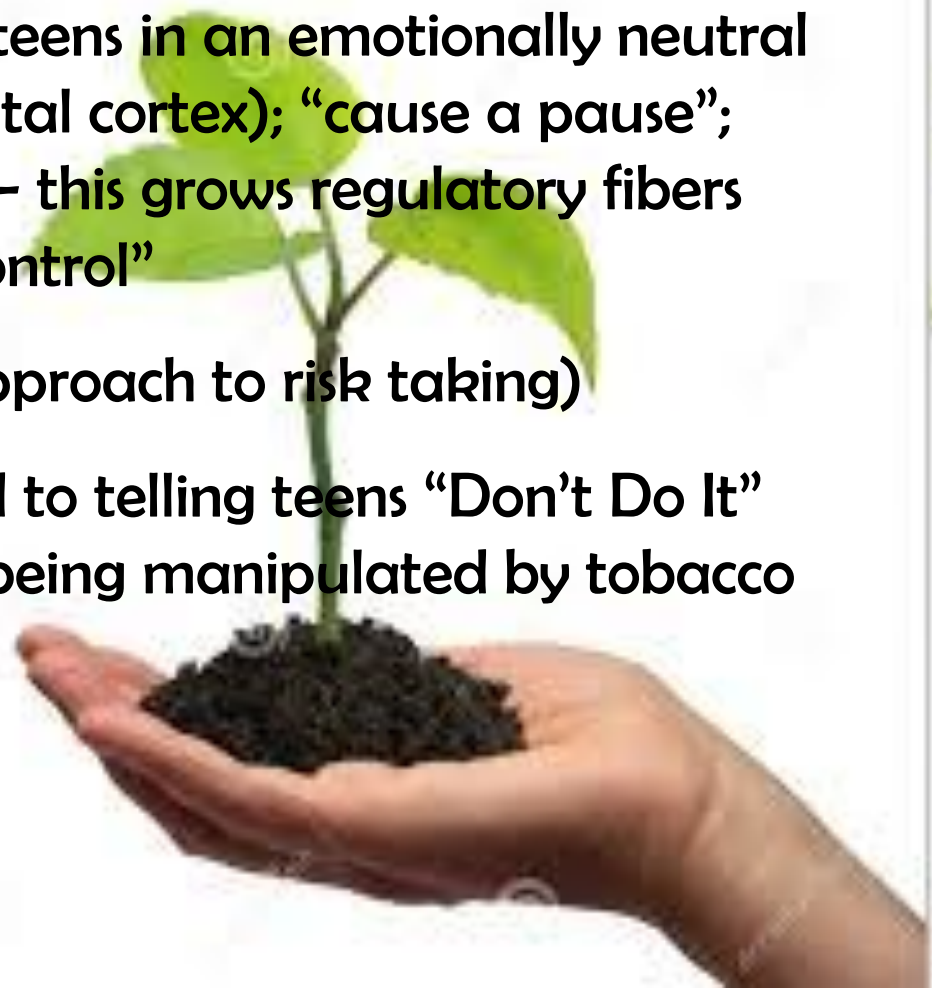
Practicing and helping teens practice good sleep hygiene

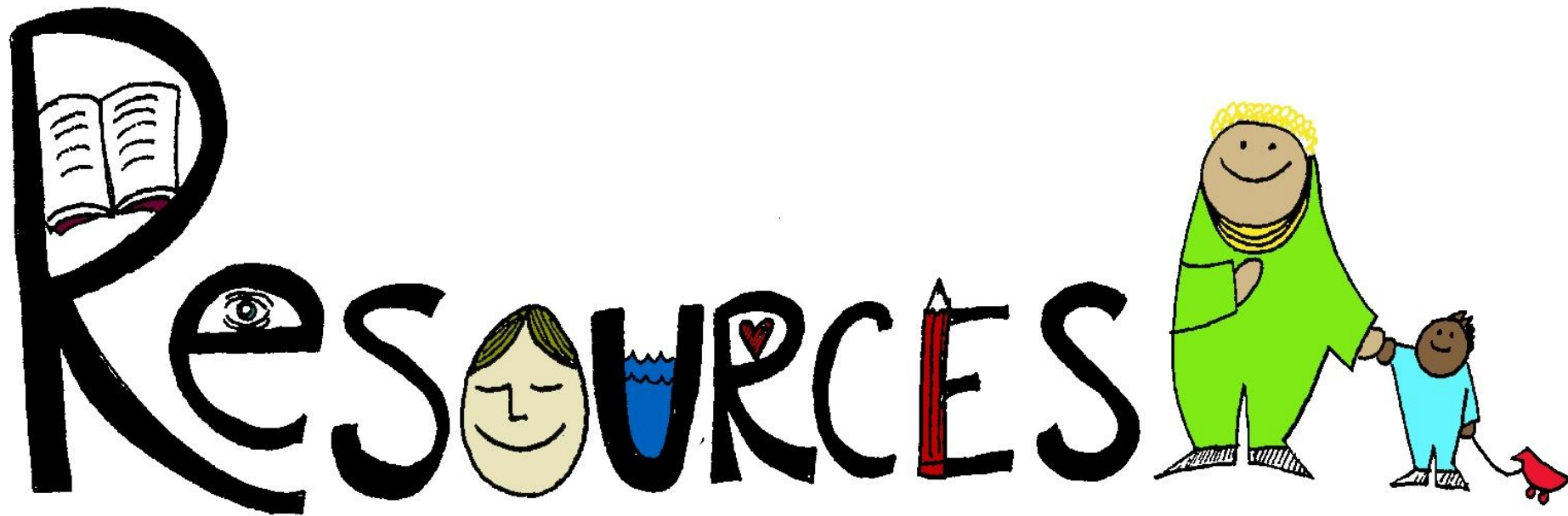
- Teens need between 8.5 and 9.25 hours of sleep per night.
- No screens for at least one hour before bed
- Turn down lights ½ hour before bed
- Avoid doing homework in bed (not associating bed with working)
- Watch caffeine intake throughout the day (pop, energy drinks, coffee, chocolate)
- Warm bath before bed
- Journal days' events to leave the worries on the page
- Continuous sleep matters (body needs to reach restorative sleep – deep sleep increases as each hour progresses)



Increasing Your Influence

- Working through decisions with teens in an emotionally neutral manner (becoming their pre-frontal cortex); “cause a pause”; engage in thoughtful reflection -- this grows regulatory fibers which help cultivate “cognitive control”
- Help set up risks (constructive approach to risk taking)
- Promote the positive as opposed to telling teens “Don’t Do It” (eg smoking: scaring vs resisting being manipulated by tobacco companies)





There are printed resources available at the end of the presentation. If you would like a digital version of the print out, it will be posted on the School's Website: VLC, Success Centre.



Calgary Board
of Education



Virtual Learning Commons Robert Thirsk High School

[Home](#)[Our Students](#)[Our Parents](#)[Our Staff](#)[Our School](#)[Our Services](#)[Our Programs](#)[Our Communication](#)

[Home](#) › [Our Services](#) › [Success Centre](#)

Success Centre

- [CSI and Wellness Talks](#)
- [IRIS \(Link\)](#)
- [Learning Plan Development \(Link\)](#)
- [Our Vision \(Success Centre\) \(Missing content\)](#)
- [Post-Secondary Planning](#)
- [Scholarships](#)

Loading

[ultranationalism](#) [Film Festival](#) [achievement](#)

[we remember](#) [thank you](#)

Celebrate

[Opening](#) [leadership](#) [essence](#) [students](#) [Robert Thirsk](#)

[honor](#) [hours](#) [Official Opening](#) [Teachers](#) [exhibits](#)

[social action](#) [remembrance day](#) [Owen de Lange](#)

Events [Gr. 11](#) [Social Studies](#) [learning](#)

citizenship [Rising Star](#) [beautiful](#) [Edwin Parr](#)

Supports

CALGARY

AHS Addictions and Mental Health, Youth Addictions Services.

Walk-in sessions (no appointment necessary) every Monday, Wednesday and Friday between 8:30 am – 10:00 am. 1005 – 17 St. N.W. Calgary, AB, Phone: 403.297.4664

PChAD

Protection of Children Abusing Drugs. Application made through addictions counsellor and parents take a letter to court to apply for a protective custody order.



Youth Addiction Services
1005 17th St. N.W. Calgary, AB
403 297 4664

Sharon Cirankewitch
Addictions Counsellor
sharon.cirankewitch@albertahealthservices.ca