

# GRADE 8 | LESSON 8

## STRATEGIES TO REDUCE RISKS

# LESSON SUMMARY

## LESSON 8: STRATEGIES TO REDUCE RISKS

- In this lesson, students will learn about strategies that can help them avoid and reduce the risks associated with sexual activity. They will learn that abstinence is the only way to avoid pregnancy and the best way to reduce their risk of STDs. In addition to abstinence, students will study the health benefits, risks and effectiveness rates of various methods of contraception, including condoms, and analyze the impact of alcohol and other drugs on safer sexual decision-making and sexual behaviors.

# LEARNING OBJECTIVES

## CORE CONCEPTS

- Define sexual abstinence as it relates to pregnancy prevention. (NSES PR.8.CC.2)
- Explain the health benefits, risks and effectiveness rates of various methods of contraception, including abstinence and condoms. (NSES PR.8.CC.3)
- Compare and contrast behaviors, including abstinence, to determine the potential risk of STD/HIV transmission from each. (NSES SH.8.CC.2)

## ACCESSING INFORMATION

- Identify medically- accurate resources about pregnancy prevention and reproductive health care. (NSES PR.8.AI.1)
- Identify medically- accurate information about emergency contraception. (NSES PR.8.AI.2)

# LEARNING OBJECTIVES

## SELF MANAGEMENT

- Describe the steps to using a condom correctly. PR.8.SM.1 (SH.8.SM.1)

## ANALYZING INFLUENCES

- Examine how alcohol and other substances, ~~friends, family, media, society and culture~~\* influence decisions about engaging in sexual behaviors. (NSES PR.8.INF.1)
- Analyze the impact of alcohol and other drugs on safer sexual decision-making and sexual behaviors. (NSES SH.8.INF.1)

\* Friends, family, media, society and culture are addressed in Lesson 6

# ADVANCE PREPARATION

## MATERIALS

- Student notebooks or scrap paper
- *Condom Usage Card Sort* sets, cut and bagged, enough for groups of 2 – 3
- Per student or Class Set copies of *Effectiveness of Family Planning Methods*
- Per student or per group copies of *Scavenger Hunt*
- Per student copies of *The Teen Brain: Under Construction* (half sheets)

## ACTIONS

- Ensure pedagogical familiarity and comfort with lesson plan
- Plan where students will write the video T-chart and end-of-lesson reflection
- Ensure functioning of audiovisual setup
- Test video playback
- Questions? Contact Michele Rusnak or a district STEM Coach.

WARM UP

## REVIEW

- What specific type of sexual activity can result pregnancy?
- What specific types of sexual activities can result in getting an STD?
- What does STD stand for?

## REVIEW

- What specific type of sexual activity can result pregnancy?
- Penis-in-vagina sex
- What specific types of sexual activities can result in getting an STD?
- Exchanging bodily fluids
- Skin-to-skin contact involving genitals, anus and/or mouth
- What does STD stand for?
- Sexually transmitted disease



## REVIEW: AVOIDING CONSEQUENCES OF SEXUAL ACTIVITY (TEACHER)

### CONSEQUENCE

- Pregnancy
- STDs

### THE ONLY WAY TO AVOID IS...

- No penis-in-vagina sex
- No exchange of bodily fluids
- No skin-to-skin contact involving genitals, anus and/or mouth

Script: During the last lesson, we discussed “pregnancy” and “STDs” as two physical consequences of sexual activity.

Script: And, remember that the only way to 100% avoid these things is...(reference the bullet points).

Transition: In this lesson, we are going to be using the term “abstinence.” (click to the next slide, “What do we mean by abstinence?”)

## REVIEW: AVOIDING CONSEQUENCES OF SEXUAL ACTIVITY

### CONSEQUENCE

- Pregnancy

- STDs

### THE ONLY WAY TO AVOID IS...

- No penis-in-vagina sex

- No exchange of bodily fluids
- No skin-to-skin contact involving genitals, anus and/or mouth

## WHAT DO WE MEAN BY ABSTINENCE?

For our purposes, **abstinence** is what must be done to avoid the consequences of sexual activity.

### CONSEQUENCE

- Pregnancy
- STDs

### ABSTINENCE MEANS TO AVOID IS...

- No penis-in-vagina sex
- No exchange of bodily fluids
- No skin-to-skin contact involving genitals, anus and/or mouth

# REDUCING THE RISKS OF STDs

## OVERVIEW: STD PREVENTION BEYOND CONDOMS

- Have students create a t-chart.
- While watching the Amaze.com video *STD Prevention Beyond Condoms*, students will take note of the behaviors that prevent STDs and those that reduce the risks associated with STDs.
- After the video, prompt students to share the behaviors they listed and discuss the relative impact each behavior has on the transmission of STDs.
- Lastly, summarize takeaways using the slides provided.

## Behaviors that impact STDs

Prevent STDs by...

Reduce the risks of STDs by...

Create a T-Chart on your paper with these titles.

As you watch the video, keep track of the behaviors that can prevent STDs and those that reduce the risks associated with STDs.

- Watch for ways to
1. Prevent STDs.
  2. Reduce the risks of STDs.



## ABSTINENCE PROTECTS

- The only way to prevent STDs is complete **abstinence** from sex and sexual behaviors.
- There are lots of reasons why people choose abstinence throughout their lives.
- In this case, abstinence means...
  - No exchange of **bodily fluids**
  - No **skin-to-skin contact** involving genitals, anus and/or mouth.



# REDUCING YOUR RISK REQUIRES TAKING ACTION

A person who chooses to engage in sexual activity can reduce the risks associated with STDs by:

- minimizing the number of partners
- improving communication with those partners
- regular STD testing and
- the correct and consistent use of protection.

HELP INTERRUPT THE STEADY CLIMB IN STDs WITH THESE THREE STEPS:

**TALK** 

Talk openly about STDs with your partners & healthcare providers.

**TEST** 

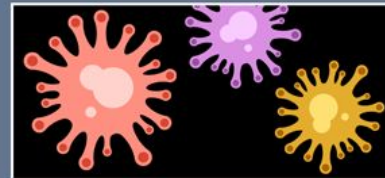
Get tested. It's the only way to know if you have an STD.

**TREAT** 

If you have an STD, work with your provider to get the right medicine.



LEFT UNTREATED, STDs CAN CAUSE:



INCREASED RISK OF GIVING OR GETTING HIV



LONG-TERM PELVIC/ABDOMINAL PAIN



INABILITY TO GET PREGNANT OR PREGNANCY COMPLICATIONS

PROTECTION

## INSTRUCTIONS: CORRECT CONDOM USAGE

- Have students complete the card sort in pairs or groups of 3.
- Use animated slide to help groups check their answers.
- Collect card sorts for next class.

## PROTECTION DEPENDS ON PROPER USAGE

In order to reduce your risks, a latex barrier must be used correctly every time you engage in sexual activity.

Correctly  
Consistently

# CORRECT CONDOM USAGE

Put the steps of correct condom usage in order.

Hold onto the rim of the condom at the base of the penis. Then, withdraw the penis.

Wait for the penis to become erect. Then, place the condom on the head of the penis and hold the tip of the condom to squeeze out any air.

Carefully remove the condom and throw it in the garbage.

Keep the condom on the penis until you're done having sex, whether or not ejaculation occurs.

Talk with your partner about the decision to have sex and the different protection options.

Check the expiration date on the condom package and look for any holes, tears or signs of damage. If the condom is expired or damaged, do not use it.

Use lubricant. The most common way a condom can break is by the lack of lubrication.

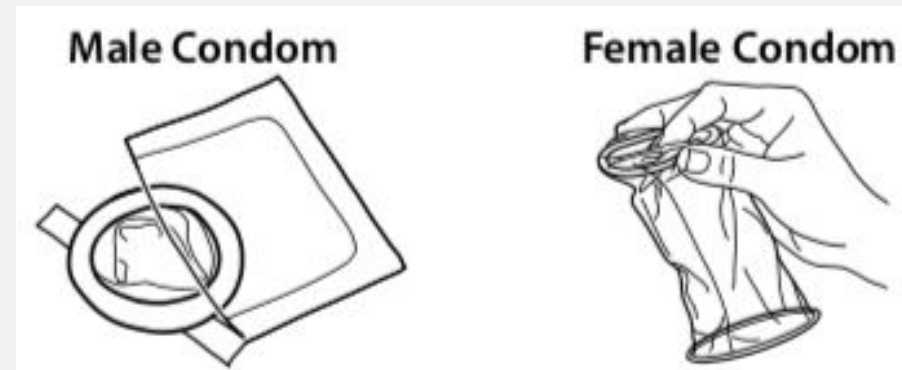
Remove the condom from the package and remove the condom.

## HOW DID YOU DO?

1. Talk with your partner about the decision to have sex and the different protection options.
2. Check the expiration date on the condom package and look for any holes, tears or signs of damage. If the condom is expired or damaged, get a new condom.
3. Carefully open the package and remove the condom.
4. Wait for the penis to become erect. Then, place the condom on the head of the penis and hold the tip of the condom to squeeze out any air.
5. Use lubricant. The most common way a condom can break is by the friction caused during sex.
6. Keep the condom on the penis until you're done having sex, whether or not ejaculation occurs.
7. Hold onto the rim of the condom at the base of the penis. Then, withdraw the penis.
8. Carefully remove the condom and throw it in the garbage.

## ONLY LATEX BARRIERS REDUCE THE RISK OF STDs

- The external (“male”) condom is one form of latex barrier.
- Others include internal (“female”) condoms and dental dams.
- Latex barriers like these are the only types of contraception that reduce the risk of STDs.



# CONTRACEPTION



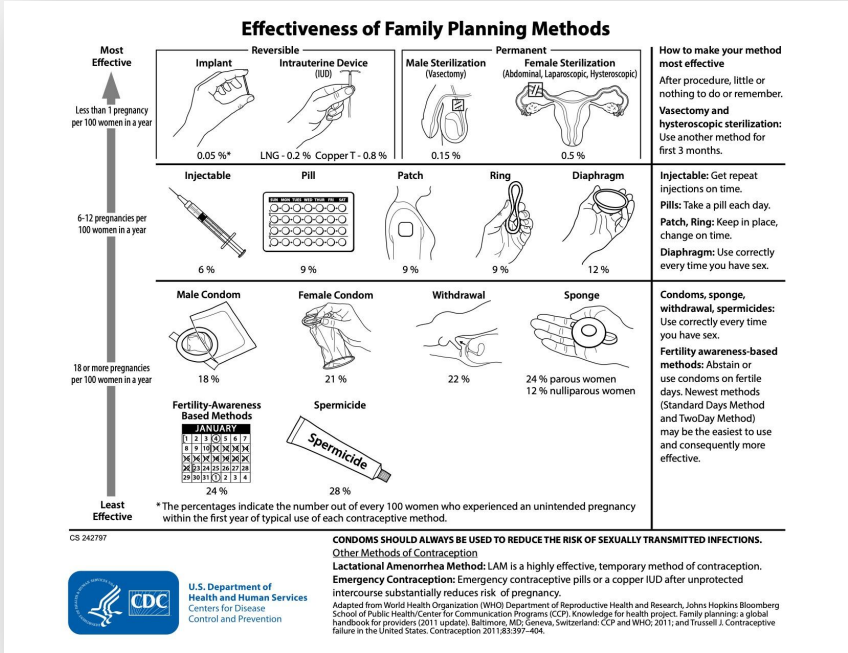
## INSTRUCTIONS: SCAVENGER HUNT

- Students can complete the scavenger hunt individually or in pairs.

## A NOTE TO TEACHERS ABOUT “COMBINING METHODS”

- Recommendations on combining contraceptive methods focus specifically on combining condoms with another form of birth control. However, please note that both the CDC and the DHHS specifically recommend that the birth control method combined with condoms be one of the lower-failure-rate versions, such as the pill, patch, ring, implant, shot or IUD.
- If you decide to mention “combining methods” beyond the statement that, “condoms should always be used to reduce the risk of sexually transmitted diseases,” please be sure your comments align with such recommendations.
- References:
  - [Birth Control Methods Fact Sheet](#) from the US Dept of Health and Human Services Office on Women’s Health
  - [It’s Your Future Infographic](#) from the US Centers for Disease Control and Prevention

# SCAVENGER HUNT



Lesson 8: Strategies to Reduce Risks

Scavenger Hunt

Reference: *Effectiveness of Family Planning Methods* (CDC)

## Multiple Choice

- This document is presenting the effectiveness of methods for reducing the risk of...  
A. Pregnancy  
B. Sexually transmitted diseases  
C. Both
- Which of these is most effective?  
A. Withdrawal  
B. External ("male") condom  
C. Spermicide

## Ranking

- Put these in order of effectiveness, with "1st" being the *most* effective: external ("male") condom, patch, ring  
1st \_\_\_\_\_ (most effective)  
2nd \_\_\_\_\_  
3rd \_\_\_\_\_ (least effective)
- Put these in order of effectiveness, with "1st" being the *most* effective: fertility-awareness based methods, IUD, pill, sponge  
1st \_\_\_\_\_ (most effective)  
2nd \_\_\_\_\_  
3rd \_\_\_\_\_  
4th \_\_\_\_\_ (least effective)

## Fill-in-the-blank

- About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical use on the pill.
- About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical male condom use.
- A \_\_\_\_\_ should always be used to reduce the risk of sexually transmitted diseases.

## HOW DID YOU DO?

1. This document is presenting the effectiveness of methods for reducing the risk of...
  - A. Pregnancy
  - B. Sexually transmitted diseases
  - C. Both
2. Which of these is most effective?
  - B. Withdrawal
  - C. External (“male”) condom
  - D. Spermicide
3. Put these in order of effectiveness, with “1st” being the most effective: fertility-awareness based methods, IUD, pill, sponge
  - 1st IUD (intrauterine device) (most effective)
  - 2nd pill
  - 3rd sponge
  - 4th Fertility-awareness... (least effective)

## HOW DID YOU DO?

4. Put these in order of effectiveness, with “1st” being the *most* effective: external (“male”) condom, patch, ring
- 1st Patch / Ring (tie) (most effective)
- 2nd External (“male”) condom
- 3rd \_\_\_\_\_ (least effective)

5. About 9 out of every 100 women experience an unintended pregnancy within the first year of typical use on the pill.
6. About 18 out of every 100 women experience an unintended pregnancy within the first year of typical male condom use.
7. A condom should always be used to reduce the risk of sexually transmitted diseases.

THE NATURE OF THE TEENAGE BRAIN  
CAN INCREASE RISKS

## INSTRUCTIONS:

### *THE TEEN BRAIN: UNDER CONSTRUCTION*

- Distribute the fill-in-the-blank notes for *The Teen Brain: Under Construction*
- Show students the word bank and explain that they should use the video to help them figure out where the words go.
- Use the provided slides to help students check their answers.

Use the video to  
fill in the blanks.

Word Bank:

- 25
- alcohol
- brain
- consequences
- cortex
- decade
- emotional
- intensely
- mature
- mental
- neural
- peer
- risk

## THE TEEN BRAIN: UNDER CONSTRUCTION

### The Teen Brain: Under Construction

Question: When does someone “grow up”? It’s a philosophical question. It could have to do with the life experiences someone has and the wisdom they gain from those experiences. It’s also a scientific question. Being a grown up is related to how \_\_\_\_\_ you are, or, more specifically, how developed your \_\_\_\_\_ is.

For years, scientists have known that the human brain is not fully developed until around the age of \_\_\_\_\_. Although we have all of our brain matter by the time we’re 12, it takes more than a \_\_\_\_\_ for all that matter to become fully wired and pruned for efficiency. This is a process called “neuromaturation,” and scientists believe it’s the reason why teens, in general, share some common behaviors like sensation-seeking, \_\_\_\_\_-taking and needing to be accepted by their peers.

The teenage brain is going through a lot of critical transformations, particularly in the prefrontal \_\_\_\_\_, which is one of the last areas of the brain to fully mature. It’s responsible for executive functions like goal-setting, paying attention, motivation, planning, understanding \_\_\_\_\_, and having self-control. So, the fact that these functions are underdeveloped is part of the reason why teenagers tend to engage in risky and impulsive behaviors like experimenting with drugs and \_\_\_\_\_, having unprotected sex, speeding and doing stupid things that drive their parents crazy.



Use the video to  
fill in the blanks.

Word Bank:

- 25
- alcohol
- brain
- consequences
- cortex
- decade
- emotional
- intensely
- mature
- mental
- neural
- peer
- risk



Subtitles are recommended for all videos, when available. *The Teen Brain: Under Construction* (2:56) from Seeker.com

# The Teen Brain: Under Construction

Question: When does someone “grow up”? It’s a philosophical question. It could have to do with the life experiences someone has and the wisdom they gain from those experiences. It’s also a scientific question. Being a grown up is related to how mature you are, or, more specifically, how developed your brain is.

For years, scientists have known that the human brain is not fully developed until around the age of 25. Although we have all of our brain matter by the time we’re 12, it takes more than a decade for all that matter to become fully wired and pruned for efficiency. This is a process called “neuromaturation,” and scientists believe it’s the reason why teens, in general, share some common behaviors like sensation-seeking, risk-taking and needing to be accepted by their peers.

The teenage brain is going through a lot of critical transformations, particularly in the prefrontal cortex, which is one of the last areas of the brain to fully mature. It’s responsible for executive functions like goal-setting, paying attention, motivation, planning, understanding consequences, and having self-control. So, the fact that these functions are underdeveloped is part of the reason why teenagers tend to engage in risky and impulsive behaviors like experimenting with drugs and alcohol, having unprotected sex, speeding and doing stupid things that drive their parents crazy.

Right around puberty, the brain's dopamine reward centers also become highly active and slowly wither out as you become an adult. This makes teenagers especially prone to peer pressure. The reward centers are super-sensitive to social approval or disapproval. One study found that a 20-year-old was 50% more likely than a fully grown adult to do something risky if 2 peers were watching. Scientists have also found that brain circuitry responsible for emotional responses are changing, making teens more responsive to emotionally-loaded situations than both children and adults. So, teenagers might seem like they're being really dramatic with their emotions, but the reality is that they are experiencing them very intensely. They are also experiencing a lot of emotions for the first time, which can exaggerate their intensity further.

Intellectually-speaking, the capacity to learn will never be as high as it is when you are a teenager, and their intellectual power and ability to do mental tasks is already right up there with adults. I think there is a tendency for grown-ups to become impatient and dismiss teens as stupid, immature and incapable, but it helps to remember that teens are undergoing a lot of neural development. It's all a part of the natural process where a human moves from dependence on caregivers to an independent, fully-functional adult, which is obviously a really important time and, in my opinion, is well-deserving of a little extra love and patience.

## BRAIN IMPAIRMENT GRAPHIC

- Follow this link to show the “brain impairment graphic.” The graphic cannot be reproduced here due to copyright restrictions.

Click Here!



Read these descriptions as you refer to the *Brain Impairment Graphic* online.

## SCRIPT FOR *BRAIN IMPAIRMENT GRAPHIC*

- Studies show that exposure to alcohol and drugs during adolescence may interrupt the natural course of brain maturation and key processes of brain development.
- The impact of drugs and alcohol on the developing brain can have harmful effects on academic, occupational and social functioning, creating **life-long habits** that can extend into adulthood.
- Consuming alcohol can change the brain's structure and functions, altering **blood flows** and **electrical activity**.
- Recent research shows heavy alcohol use may affect brain functioning in early adolescence, even in youths who are physically healthy. Changes like these can impact **long-term brain functioning**.
- Drugs tap into the brain's **communication** system and disrupt the way nerve cells normally send, receive and process information.
- Different drugs work differently, and some can continue to affect the brain long after the person has stopped taking them, sometimes permanently.

ALCOHOL AND DRUGS CAN CAUSE BRAIN  
IMPAIRMENT

Click Here!



REFLECTION

## 3 – 2 – 1 REFLECTION

- Three (3) facts I learned today...
- Two (2) things I think are important to share with others...
- One (1) question I still have...



# BIBLIOGRAPHY

“Alcohol, Drugs, and Brain Development.” *Speak Now*, Colorado Behavioral Health-Department of Human Services, 2019, <https://www.speaknowcolorado.org/know-the-facts/alcohol-drugs-brain-development/>. (Accessed October 2, 2019)

AMAZE.Org. *STD Prevention Beyond Condoms*, Amaze.org- YouTube, 29 Aug. 2019, <https://www.youtube.com/watch?v=4lcFmDTABjY&feature=youtu.be>. (Accessed October 2, 2019)

Carboni, Anthony. *Seeker-The Teen Brain: Under Construction*, Seeker, 8 Dec. 2013, <https://www.seeker.com/the-teen-brain-under-construction-1792414389.html>. (Accessed October 2, 2019)

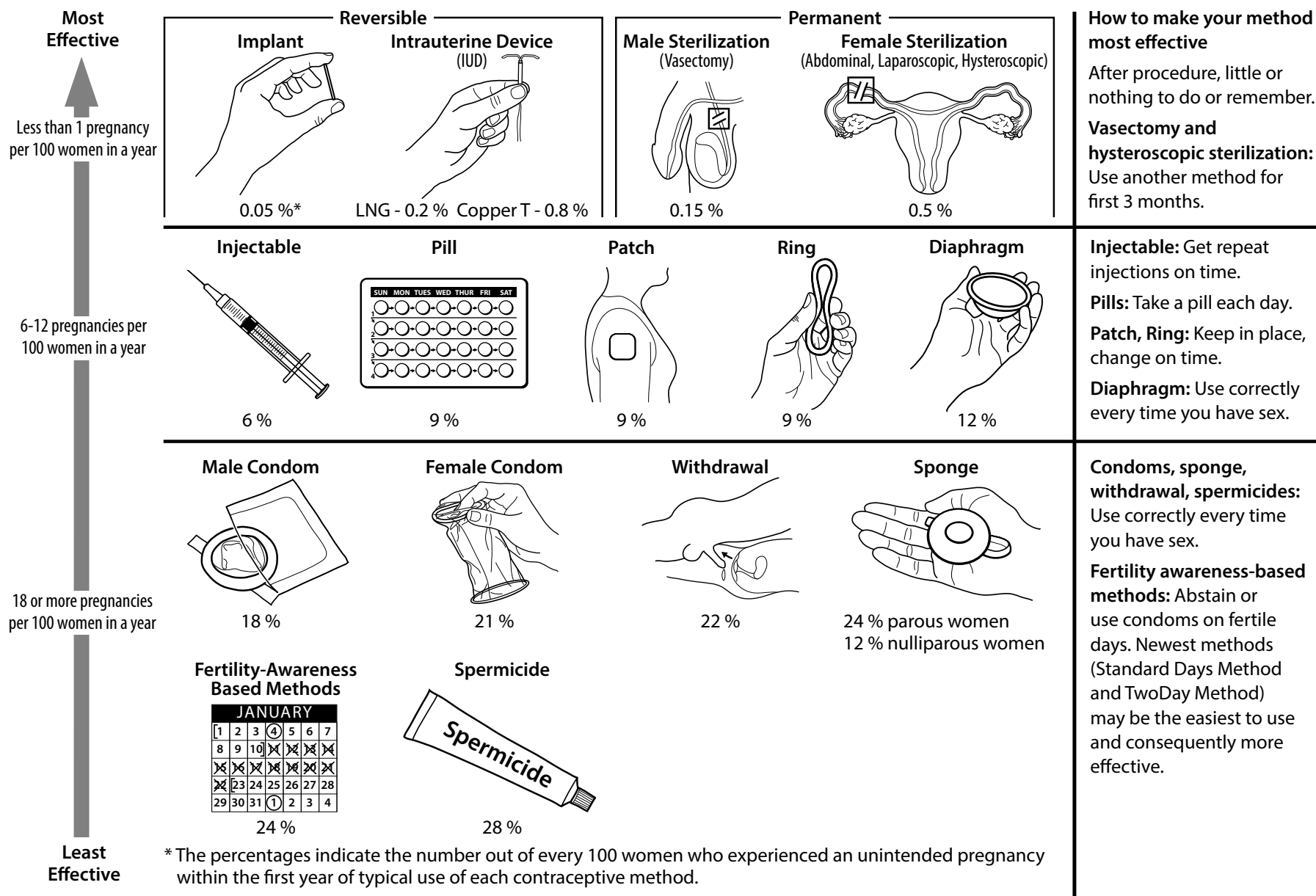
“Effectiveness of Family Planning Methods.” *Centers for Disease Control and Prevention*, U.S. Department of Health & Human Services, 2011, [https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/pdf/Contraceptive\\_methods\\_508.pdf](https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/pdf/Contraceptive_methods_508.pdf). (Accessed October 2, 2019)

“Social Media Toolkit | 2017 Sexually Transmitted Diseases Surveillance.” *Centers for Disease Control and Prevention*, U.S. Department of Health & Human Services, 18 Sept. 2018, <https://www.cdc.gov/std/stats17/socialMedia.htm>. (Accessed October 2, 2019)

Talk with your partner about the decision to have sex and the different protection options.	Carefully open the package and remove the condom.
Hold onto the rim of the condom at the base of the penis. Then, withdraw the penis.	Check the expiration date on the condom package and look for any holes, tears or signs of damage. If the condom is expired or damaged, get a new condom.
Wait for the penis to become erect. Then, place the condom on the head of the penis and hold the tip of the condom to squeeze out any air.	Use lubricant. The most common way a condom can break is by the friction caused during sex.
Keep the condom on the penis until you're done having sex, whether or not ejaculation occurs.	Carefully remove the condom and throw it in the garbage.

Talk with your partner about the decision to have sex and the different protection options.	Carefully open the package and remove the condom.
Hold onto the rim of the condom at the base of the penis. Then, withdraw the penis.	Check the expiration date on the condom package and look for any holes, tears or signs of damage. If the condom is expired or damaged, get a new condom.
Wait for the penis to become erect. Then, place the condom on the head of the penis and hold the tip of the condom to squeeze out any air.	Use lubricant. The most common way a condom can break is by the friction caused during sex.
Keep the condom on the penis until you're done having sex, whether or not ejaculation occurs.	Carefully remove the condom and throw it in the garbage.

# Effectiveness of Family Planning Methods



CS 242797

**CONDOMS SHOULD ALWAYS BE USED TO REDUCE THE RISK OF SEXUALLY TRANSMITTED INFECTIONS.**

Other Methods of Contraception

**Lactational Amenorrhea Method:** LAM is a highly effective, temporary method of contraception.

**Emergency Contraception:** Emergency contraceptive pills or a copper IUD after unprotected intercourse substantially reduces risk of pregnancy.

Adapted from World Health Organization (WHO) Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP). Knowledge for health project. Family planning: a global handbook for providers (2011 update). Baltimore, MD; Geneva, Switzerland: CCP and WHO; 2011; and Trussell J. Contraceptive failure in the United States. Contraception 2011;83:397-404.



**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention

Reference: *Effectiveness of Family Planning Methods* (CDC)

**Multiple Choice**

1. This document is presenting the effectiveness of methods for reducing the risk of...
  - A. Pregnancy
  - B. Sexually transmitted diseases
  - C. Both
2. Which of these is most effective?
  - A. Withdrawal
  - B. External ("male") condom
  - C. Spermicide

**Ranking**

3. Put these in order of effectiveness, with "1st" being the *most* effective: fertility-awareness based methods, IUD, pill, sponge

1st \_\_\_\_\_ (most effective)

2nd \_\_\_\_\_

3rd \_\_\_\_\_

4th \_\_\_\_\_ (least effective)

4. Put these in order of effectiveness, with "1st" being the *most* effective: external ("male") condom, patch, ring

1st \_\_\_\_\_ (most effective)

2nd \_\_\_\_\_

3rd \_\_\_\_\_ (least effective)

**Fill-in-the-blank**

5. About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical use on the pill.
6. About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical male condom use.
7. A \_\_\_\_\_ should always be used to reduce the risk of sexually transmitted diseases.

## The Teen Brain: Under Construction

Question: When does someone “grow up”? It’s a philosophical question. It could have to do with the life experiences someone has and the wisdom they gain from those experiences. It’s also a scientific question. Being a grown up is related to how \_\_\_\_\_ you are, or, more specifically, how developed your \_\_\_\_\_ is.

For years, scientists have known that the human brain is not fully developed until around the age of \_\_\_\_\_. Although we have all of our brain matter by the time we’re 12, it takes more than a \_\_\_\_\_ for all that matter to become fully wired and pruned for efficiency. This is a process called “neuromaturation,” and scientists believe it’s the reason why teens, in general, share some common behaviors like sensation-seeking, \_\_\_\_\_ -taking and needing to be accepted by their peers.

The teenage brain is going through a lot of critical transformations, particularly in the prefrontal \_\_\_\_\_, which is one of the last areas of the brain to fully mature. It’s responsible for executive functions like goal-setting, paying attention, motivation, planning, understanding \_\_\_\_\_, and having self-control. So, the fact that these functions are underdeveloped is part of the reason why teenagers tend to engage in risky and impulsive behaviors like experimenting with drugs and \_\_\_\_\_, having unprotected sex, speeding and doing stupid things that drive their parents crazy.

## The Teen Brain: Under Construction

Question: When does someone “grow up”? It’s a philosophical question. It could have to do with the life experiences someone has and the wisdom they gain from those experiences. It’s also a scientific question. Being a grown up is related to how \_\_\_\_\_ you are, or, more specifically, how developed your \_\_\_\_\_ is.

For years, scientists have known that the human brain is not fully developed until around the age of \_\_\_\_\_. Although we have all of our brain matter by the time we’re 12, it takes more than a \_\_\_\_\_ for all that matter to become fully wired and pruned for efficiency. This is a process called “neuromaturation,” and scientists believe it’s the reason why teens, in general, share some common behaviors like sensation-seeking, \_\_\_\_\_ -taking and needing to be accepted by their peers.

The teenage brain is going through a lot of critical transformations, particularly in the prefrontal \_\_\_\_\_, which is one of the last areas of the brain to fully mature. It’s responsible for executive functions like goal-setting, paying attention, motivation, planning, understanding \_\_\_\_\_, and having self-control. So, the fact that these functions are underdeveloped is part of the reason why teenagers tend to engage in risky and impulsive behaviors like experimenting with drugs and \_\_\_\_\_, having unprotected sex, speeding and doing stupid things that drive their parents crazy.

Right around puberty, the brain's dopaminergic reward centers also become highly active and slowly wither out as you become an adult. This makes teenagers especially prone to \_\_\_\_\_ pressure. The reward centers are super-sensitive to social approval or disapproval. One study found that a 20-year-old was 50% more likely than a fully grown adult to do something risky if 2 peers were watching. Scientists have also found that brain circuitry responsible for \_\_\_\_\_ responses are changing, making teens more responsive to emotionally-loaded situations than both children and adults. So, teenagers might seem like they're being really dramatic with their emotions, but the reality is that they are experiencing them very \_\_\_\_\_. They are also experiencing a lot of emotions for the first time, which can exaggerate their intensity further.

Intellectually-speaking, the capacity to learn will never be as high as it is when you are a teenager, and their intellectual power and ability to do \_\_\_\_\_ tasks is already right up there with adults. I think there is a tendency for grown-ups to become impatient and dismiss teens as stupid, immature and incapable, but it helps to remember that teens are undergoing a lot of \_\_\_\_\_ development. It's all a part of the natural process where a human moves from dependence on caregivers to an independent, fully-functional adult, which is obviously a really important time and, in my opinion, is well-deserving of a little extra love and patience.

Right around puberty, the brain's dopaminergic reward centers also become highly active and slowly wither out as you become an adult. This makes teenagers especially prone to \_\_\_\_\_ pressure. The reward centers are super-sensitive to social approval or disapproval. One study found that a 20-year-old was 50% more likely than a fully grown adult to do something risky if 2 peers were watching. Scientists have also found that brain circuitry responsible for \_\_\_\_\_ responses are changing, making teens more responsive to emotionally-loaded situations than both children and adults. So, teenagers might seem like they're being really dramatic with their emotions, but the reality is that they are experiencing them very \_\_\_\_\_. They are also experiencing a lot of emotions for the first time, which can exaggerate their intensity further.

Intellectually-speaking, the capacity to learn will never be as high as it is when you are a teenager, and their intellectual power and ability to do \_\_\_\_\_ tasks is already right up there with adults. I think there is a tendency for grown-ups to become impatient and dismiss teens as stupid, immature and incapable, but it helps to remember that teens are undergoing a lot of \_\_\_\_\_ development. It's all a part of the natural process where a human moves from dependence on caregivers to an independent, fully-functional adult, which is obviously a really important time and, in my opinion, is well-deserving of a little extra love and patience.

Talk with your partner about the decision to have sex and the different protection options.	Carefully open the package and remove the condom.
Hold onto the rim of the condom at the base of the penis. Then, withdraw the penis.	Check the expiration date on the condom package and look for any holes, tears or signs of damage. If the condom is expired or damaged, get a new condom.
Wait for the penis to become erect. Then, place the condom on the head of the penis and hold the tip of the condom to squeeze out any air.	Use lubricant. The most common way a condom can break is by the friction caused during sex.
Keep the condom on the penis until you're done having sex, whether or not ejaculation occurs.	Carefully remove the condom and throw it in the garbage.

Talk with your partner about the decision to have sex and the different protection options.	Carefully open the package and remove the condom.
Hold onto the rim of the condom at the base of the penis. Then, withdraw the penis.	Check the expiration date on the condom package and look for any holes, tears or signs of damage. If the condom is expired or damaged, get a new condom.
Wait for the penis to become erect. Then, place the condom on the head of the penis and hold the tip of the condom to squeeze out any air.	Use lubricant. The most common way a condom can break is by the friction caused during sex.
Keep the condom on the penis until you're done having sex, whether or not ejaculation occurs.	Carefully remove the condom and throw it in the garbage.





Reference: *Effectiveness of Family Planning Methods* (CDC)

**Multiple Choice**

1. This document is presenting the effectiveness of methods for reducing the risk of...
  - A. Pregnancy
  - B. Sexually transmitted diseases
  - C. Both
2. Which of these is most effective?
  - A. Withdrawal
  - B. External ("male") condom
  - C. Spermicide

**Ranking**

3. Put these in order of effectiveness, with "1st" being the *most* effective: fertility-awareness based methods, IUD, pill, sponge

1st \_\_\_\_\_ (most effective)

2nd \_\_\_\_\_

3rd \_\_\_\_\_

4th \_\_\_\_\_ (least effective)

4. Put these in order of effectiveness, with "1st" being the *most* effective: external ("male") condom, patch, ring

1st \_\_\_\_\_ (most effective)

2nd \_\_\_\_\_

3rd \_\_\_\_\_ (least effective)

**Fill-in-the-blank**

5. About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical use on the pill.
6. About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical male condom use.
7. A \_\_\_\_\_ should always be used to reduce the risk of sexually transmitted diseases.

Reference: *Effectiveness of Family Planning Methods* (CDC)

**Multiple Choice**

1. This document is presenting the effectiveness of methods for reducing the risk of...
  - A. Pregnancy
  - B. Sexually transmitted diseases
  - C. Both
2. Which of these is most effective?
  - A. Withdrawal
  - B. External ("male") condom
  - C. Spermicide

**Ranking**

3. Put these in order of effectiveness, with "1st" being the *most* effective: fertility-awareness based methods, IUD, pill, sponge

1st \_\_\_\_\_ (most effective)

2nd \_\_\_\_\_

3rd \_\_\_\_\_

4th \_\_\_\_\_ (least effective)

4. Put these in order of effectiveness, with "1st" being the *most* effective: external ("male") condom, patch, ring

1st \_\_\_\_\_ (most effective)

2nd \_\_\_\_\_

3rd \_\_\_\_\_ (least effective)

**Fill-in-the-blank**

5. About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical use on the pill.
6. About \_\_\_\_\_ out of every 100 women experience an unintended pregnancy within the first year of typical male condom use.
7. A \_\_\_\_\_ should always be used to reduce the risk of sexually transmitted diseases.

# The Teen Brain: Under Construction

Question: When does someone “grow up”? It’s a philosophical question. It could have to do with the life experiences someone has and the wisdom they gain from those experiences. It’s also a scientific question. Being a grown up is related to how \_\_\_\_\_ you are, or, more specifically, how developed your \_\_\_\_\_ is.

For years, scientists have known that the human brain is not fully developed until around the age of \_\_\_\_\_. Although we have all of our brain matter by the time we’re 12, it takes more than a \_\_\_\_\_ for all that matter to become fully wired and pruned for efficiency. This is a process called “neuromaturation,” and scientists believe it’s the reason why teens, in general, share some common behaviors like sensation-seeking, \_\_\_\_\_-taking and needing to be accepted by their peers.

The teenage brain is going through a lot of critical transformations, particularly in the prefrontal \_\_\_\_\_, which is one of the last areas of the brain to fully mature. It’s responsible for executive functions like goal-setting, paying attention, motivation, planning, understanding \_\_\_\_\_, and having self-control. So, the fact that these functions are underdeveloped is part of the reason why teenagers tend to engage in risky and impulsive behaviors like experimenting with drugs and \_\_\_\_\_, having unprotected sex, speeding and doing stupid things that drive their parents crazy.

# The Teen Brain: Under Construction

Question: When does someone “grow up”? It’s a philosophical question. It could have to do with the life experiences someone has and the wisdom they gain from those experiences. It’s also a scientific question. Being a grown up is related to how \_\_\_\_\_ you are, or, more specifically, how developed your \_\_\_\_\_ is.

For years, scientists have known that the human brain is not fully developed until around the age of \_\_\_\_\_. Although we have all of our brain matter by the time we’re 12, it takes more than a \_\_\_\_\_ for all that matter to become fully wired and pruned for efficiency. This is a process called “neuromaturation,” and scientists believe it’s the reason why teens, in general, share some common behaviors like sensation-seeking, \_\_\_\_\_-taking and needing to be accepted by their peers.

The teenage brain is going through a lot of critical transformations, particularly in the prefrontal \_\_\_\_\_, which is one of the last areas of the brain to fully mature. It’s responsible for executive functions like goal-setting, paying attention, motivation, planning, understanding \_\_\_\_\_, and having self-control. So, the fact that these functions are underdeveloped is part of the reason why teenagers tend to engage in risky and impulsive behaviors like experimenting with drugs and \_\_\_\_\_, having unprotected sex, speeding and doing stupid things that drive their parents crazy.

Right around puberty, the brain's dopaminergic reward centers also become highly active and slowly wither out as you become an adult. This makes teenagers especially prone to \_\_\_\_\_ pressure. The reward centers are super-sensitive to social approval or disapproval. One study found that a 20-year-old was 50% more likely than a fully grown adult to do something risky if 2 peers were watching. Scientists have also found that brain circuitry responsible for \_\_\_\_\_ responses are changing, making teens more responsive to emotionally-loaded situations than both children and adults. So, teenagers might seem like they're being really dramatic with their emotions, but the reality is that they are experiencing them very \_\_\_\_\_. They are also experiencing a lot of emotions for the first time, which can exaggerate their intensity further.

Intellectually-speaking, the capacity to learn will never be as high as it is when you are a teenager, and their intellectual power and ability to do \_\_\_\_\_ tasks is already right up there with adults. I think there is a tendency for grown-ups to become impatient and dismiss teens as stupid, immature and incapable, but it helps to remember that teens are undergoing a lot of \_\_\_\_\_ development. It's all a part of the natural process where a human moves from dependence on caregivers to an independent, fully-functional adult, which is obviously a really important time and, in my opinion, is well-deserving of a little extra love and patience.

Right around puberty, the brain's dopaminergic reward centers also become highly active and slowly wither out as you become an adult. This makes teenagers especially prone to \_\_\_\_\_ pressure. The reward centers are super-sensitive to social approval or disapproval. One study found that a 20-year-old was 50% more likely than a fully grown adult to do something risky if 2 peers were watching. Scientists have also found that brain circuitry responsible for \_\_\_\_\_ responses are changing, making teens more responsive to emotionally-loaded situations than both children and adults. So, teenagers might seem like they're being really dramatic with their emotions, but the reality is that they are experiencing them very \_\_\_\_\_. They are also experiencing a lot of emotions for the first time, which can exaggerate their intensity further.

Intellectually-speaking, the capacity to learn will never be as high as it is when you are a teenager, and their intellectual power and ability to do \_\_\_\_\_ tasks is already right up there with adults. I think there is a tendency for grown-ups to become impatient and dismiss teens as stupid, immature and incapable, but it helps to remember that teens are undergoing a lot of \_\_\_\_\_ development. It's all a part of the natural process where a human moves from dependence on caregivers to an independent, fully-functional adult, which is obviously a really important time and, in my opinion, is well-deserving of a little extra love and patience.

Answer Key

# The Teen Brain: Under Construction

Question: When does someone “grow up”? It’s a philosophical question. It could have to do with the life experiences someone has and the wisdom they gain from those experiences. It’s also a scientific question. Being a grown up is related to how **mature** you are, or, more specifically, how developed your **brain** is.

For years, scientists have known that the human brain is not fully developed until around the age of **25**. Although we have all of our brain matter by the time we’re 12, it takes more than a **decade** for all that matter to become fully wired and pruned for efficiency. This is a process called “neuromaturation,” and scientists believe it’s the reason why teens, in general, share some common behaviors like sensation-seeking, **risk**-taking and needing to be accepted by their peers.

The teenage brain is going through a lot of critical transformations, particularly in the prefrontal **cortex**, which is one of the last areas of the brain to fully mature. It’s responsible for executive functions like goal-setting, paying attention, motivation, planning, understanding **consequences**, and having self-control. So, the fact that these functions are underdeveloped is part of the reason why teenagers tend to engage in risky and impulsive behaviors like experimenting with drugs and **alcohol**, having unprotected sex, speeding and doing stupid things that drive their parents crazy.



Right around puberty, the brain's dopaminergic reward centers also become highly active and slowly wither out as you become an adult. This makes teenagers especially prone to **peer** pressure. The reward centers are super-sensitive to social approval or disapproval. One study found that a 20-year-old was 50% more likely than a fully grown adult to do something risky if 2 peers were watching. Scientists have also found that brain circuitry responsible for **emotional** responses are changing, making teens more responsive to emotionally-loaded situations than both children and adults. So, teenagers might seem like they're being really dramatic with their emotions, but the reality is that they are experiencing them very **intensely**. They are also experiencing a lot of emotions for the first time, which can exaggerate their intensity further.

Intellectually-speaking, the capacity to learn will never be as high as it is when you are a teenager, and their intellectual power and ability to do **mental** tasks is already right up there with adults. I think there is a tendency for grown-ups to become impatient and dismiss teens as stupid, immature and incapable, but it helps to remember that teens are undergoing a lot of **neural** development. It's all a part of the natural process where a human moves from dependence on caregivers to an independent, fully-functional adult, which is obviously a really important time and, in my opinion, is well-deserving of a little extra love and patience.