

Sleep deprivation hits students hard

As junior Tommy Chang sits through his classes throughout the day, he finds it harder and harder to pay attention. Words blur as he drifts in and out of sleep. Chang is sleep deprived, or suffering from a lack of sleep.

Chang is an IB diploma candidate and gets loads of work every day. The IB diploma is the most demanding track in high school and the work takes tolls on students like Chang.

In addition to the heavy workload, Chang, like many high school students, has other responsibilities and methods of procrastination to attend to.

"I'll usually get home and do my chores, then start my homework, eat lunch, either finish up or watch a show, then go to bed," Chang said when asked about his after school routine. Once all of his homework and responsibilities are out of the way, Chang finally gets to unwind and go to sleep. By this time, however, it is already late at night and his sleep schedule stays unchanged.

A high school student can suffer from sleep deprivation for many reasons. However, the main cause is the deadly combination of procrastination and a heavy workload. Everyone's work load is dependent on the rigor of their classes but no matter what classes you take, you're bound to have a lot of work.

Chang, like many high school students, has his own method to manage his time more effectively.

"I've been trying to use my agenda to improve my schedule recently," Chang said when asked how he could break his unhealthy sleeping habits. "I find that making a checklist really improves my efficiency when I have a lot of assignments."

Although Chang is making strides to fix his sleeping habits, he still suffers from sleep deprivation. "I'm usually tired

during school, especially during the middle of the school day," Chang said.

When a student is suffering from sleep deprivation, it greatly affects their academic performance in school. Chang is no different.

"My lack of sleep affects my performance in school sometimes," Chang said. "Most of the time I can make sure I'm paying attention, but occasionally I'll drift off or zone out."

Despite the issue of sleep deprivation being prominent in high schools like AHS, not much can be done to help students. Work loads cannot be altered too much and the habit of procrastination is one that is hard to break. To get enough sleep every night, students must take initiative to be on top of their school work and other responsibilities.

According to assm.org, the primary effect of sleep deprivation is excessive daytime sleepiness. A sleep deprived person is likely to fall asleep when forced to sit still in a quiet situation, such as during a meeting or class.

Sleep deprivation can affect your mood as well. Common moods among sleep deprived teens are irritability, anxiety or lack of motivation. Sleep deprived teens can also suffer from lack of concentration, lack of energy, forgetfulness and fatigue.

Another problem that exists within sleep deprivation are the methods used to combat the effects. Many teens turn to caffeine to cop with their sleepiness and some even turn to drugs such as adderall. These methods can, rather than help ones sleep deprivation, build a dependence on these artificial energizers.

There are positive and healthy ways to help your sleep deprivation however, According to medicalnewstoday.com, some suggestions for good sleep habits include: going to bed when tired, following a routine for bed and wake-up times and avoiding food 2 to 3 hours before bedtime.

Also, medicalnewstoday.com recommends engaging in regular exercise during the day, keeping the bedroom quiet, dark and cool and turning off electronic devices when you go to bed.

Director of CDC's Division of Population Health Wayne Giles

recognizes that Americans do not get enough sleep in general, "As a nation we are not getting enough sleep," Giles said.

Giles also recommends techniques that anyone can do to get a good night sleep, "Lifestyle changes such as going to bed at the same time each night; rising at the same time each morning; and turning off or removing televisions, computers, mobile devices from the bedroom, can help people get the healthy sleep they need."

Many students like Tommy Chang struggle through their school day without a sufficient amount of sleep. If a student is suffering from sleep deprivation, it is important to contact a doctor or make sure to work on your sleep schedule.

Narcan: Why it needs to be on school grounds

With the growing problem of opioid overdoses in America, Naloxone is almost a necessity on school grounds. An opioid overdose can happen on AHS grounds at any time so it is important that the nurse and school officials are able to access narcan when necessary.

Narcan could save someone's life, without it our school community is not taking the necessary precautions to be as safe as possible.

Around the country, narcan is becoming more and more available on school grounds while AHS has not followed suit.

"There are only some officers on the street that have been trained," School Resource Officer Adam Curcio said. "If there was something like that [an opioid overdose] I'd have to call rescue."

Learning about narcan, its benefits and its importance is important to understand why it is a necessity on school

grounds.

Narcan is a brand name nasal spray version of the drug naloxone. Naloxone is an opioid antagonist, meaning it reverses the effects of opioid use, and an opioid overdose. It does this by knocking the drugs out of the opioid receptors in the central nervous system.

Naloxone can be administered as a shot, while Narcan is specifically a nasal spray that can be given during an overdose. While narcan and naloxone are technically prescription drugs, there has been a big national push to make them as widely available and as accessible as possible. In most states, you can purchase narcan over-the-counter, and it's even becoming increasingly available in schools.

The effects of naloxone are to temporarily block opioid receptors and prevent opioid drugs from working. Naloxone cannot be used to get high, so it has no potential for misuse. There is no evidence that extended use of naloxone can cause harmful physical effects or dependence. People who take naloxone do not develop a tolerance to its effects and there have been no reported deaths from naloxone overdose.

Without narcan available on school grounds, the protection against opioid overdose is little. Nurses and school officials in AHS should be trained to administer narcan in case of an emergency.

Without narcan, student health and safety is not completely safe.

NO ESCAPE: Opioid addiction shocks America

Every day, more than 115 people in the United States die after overdosing on opioids. The misuse of and addiction to

opioids—including prescription pain relievers, heroin, and synthetic opioids such as fentanyl—is a serious national crisis that affects public health as well as social and economic welfare.

Despite the opioid epidemic being widely reported, little has been done to change the current state of the issue. It seems that this epidemic skyrocketed out of nowhere. To fully understand the epidemic, it is first important to understand how it started.

In the late 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to prescription opioid pain relievers. Due to this, healthcare providers began to prescribe them at greater rates.

The rising rate of prescription painkillers being sold resulted in the widespread diversion and misuse of these medications before it became clear that these medications could indeed be highly addictive. This caused the rate of opioid overdoses to rise dramatically.

In 2015 alone, 33,000 Americans died as a result of an opioid overdose. That same year, an estimated 2 million people in the United States suffered from substance use disorders related to prescription opioid pain relievers.

Within a suburban community like Fairfax County, problems such as opioid addiction is often overlooked.

When AHS students were asked about whether they think that opioid addiction is a problem in our community, many students said no and were even confused to what an opioid actually is. This, however, is not the case. According to fairfaxcounty.gov, Fairfax County has more than 100 drug-related deaths, 80 of which were related to opioid overdose.

The numbers are evidence: the issue of addiction and overdose to opioids has become a public health crisis. Health care

providers know the effects of the drugs that they mass produce but little is done to stop the flow of prescribed pain killers. The profit that comes from highly addictive painkillers is too great for the corporations to resist.

With little to no help in the prevention of opioid sales, government departments such as the Department of Health and Human Services, the National Institutes of Health and the Food and Drug Administration work to stifle the epidemic.

In response to the opioid crisis, HHS is focusing its efforts on five major priorities. These priorities are improving access to treatment and recovery services, promoting use of overdose-reversing drugs, strengthening our understanding of the epidemic through better public health surveillance, providing support for cutting-edge research on pain and addiction and advancing better practices for pain management.

The NIH, a component of HHS, is the nation's leading medical research agency helping solve the opioid crisis. To help, the NIH met with pharmaceutical companies and academic research centers to discuss safe, effective, non-addictive strategies to manage chronic pain, new, innovative medications and technologies to treat opioid use disorders and improved overdose prevention and reversal interventions to save lives and support recovery.

In a statement by FDA commissioner Scott Gottlieb, he discusses what needs to be done in order to limit the flow of prescribed opioids. "Patients must be prescribed opioids only for durations of treatment that closely match their clinical circumstances and that don't expose them unnecessarily to prolonged use, which increases the risk of opioid addiction." Gottlieb said.

In another statement by Scott Gottlieb, he discusses what actions the FDA has already taken to help reduce the cases of opioid addiction.

“First, we set out to cut the rate of new addiction. We did this in part by taking new steps to rationalize the prescribing of opioids, and amounts dispensed, as a way to reduce exposure to the drugs in the medical setting,” Gottlieb said.

“Second, we’ve stepped up enforcement of the marketing and sale of illicit opioids. One way that we’re doing this is by targeting online sites that enable the illegal sale of these drugs and their shipment through the mail,” Gottlieb stated.

“Finally, we’ve undertaken new efforts to support novel product innovation. This includes innovation in treatments for opioid addiction, and efforts to promote their more widespread use. It also includes steps to advance the development of non-addictive treatments for pain. We have great concern for the millions of Americans who live with chronic pain and for whom traditional treatment options have been exhausted,” Gottlieb said.

Despite the actions taken by various government departments, highly addictive opioids are running rampant in the streets of America.

Flu shot vaccine proves to be essential

It’s flu season across America. People across the country are getting vaccinated in preparation for the risk of catching the flu. Like many schools, AHS is vulnerable to the widespread infection of students. AHS has already seen a case of the flu this school year. Some Americans have their doubts about the flu vaccine. Before vaccinating it is important to know the

facts.

What is the flu?

The flu is caused by a virus. Common symptoms of the flu include: Fever and chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headache and feeling very tired. The flu is worse than the common cold. It's a common cause of problems like sinus or ear infections. It can also cause serious complications such as pneumonia or worsening of long-term health problems, like asthma or heart failure. However, these serious complications only occur when the flu goes untreated.

Who needs to get the flu vaccine?

Everyone age 6 months or older needs to get the flu vaccine every year. It's part of the routine vaccine schedules for children, teens, and adults. No one under the age of six months should receive the flu vaccine.

What are the side effects of the flu vaccine?

Side effects are usually mild and go away in a few days. These side effects aren't the flu – the flu vaccine cannot cause the flu. Side effects include: Pain, swelling, or redness where the shot was given, headache, muscle aches, fever or upset stomach

Where can you receive a flu vaccine?

Flu vaccines are offered in many doctor's offices, clinics, health departments, pharmacies and college health centers, as well as by many employers and even in some schools.

Even if you do not have a regular doctor or nurse, you can get a flu vaccine somewhere else, like a health department, pharmacy, urgent care clinic, and often your school, college health center, or workplace.

Why should you get the flu vaccine?

Influenza is a potentially serious disease that can lead to hospitalization and sometimes even death. Every flu season is

different, and the influenza infection can affect people differently, but millions of people get the flu every year, hundreds of thousands of people are hospitalized and thousands or tens of thousands of people die from flu-related causes every year.

An annual seasonal flu vaccine is the best way to help protect against flu. Vaccination has been shown to have many benefits including reducing the risk of flu illnesses, hospitalizations and even the risk of flu-related death in children.

Getting your flu shot is a very important part in staying healthy.

To prevent the spread of flu and keep healthy, get your flu shot as soon as possible.

The dangers of the quick striking meningitis B

A recent commercial promoting the meningitis B vaccine depicts an animated college boy leaving home without being properly vaccinated. The images of the commercial are not the focal point whereas the facts provided within are.

The commercial states that meningitis B progresses quickly and can be fatal, even with 24 hours. It also states that although meningitis B is uncommon, 1 in 10 infected will die. The commercial heads warning to the notion that many teens are not vaccinated, stressing the importance of this vaccination before college. The thought of contracting meningitis B is scary to any parent or teen due to the deadly effects it has.

Many wonder, where does meningitis B come from? Meningitis is first Meningococcal disease which is a serious illness caused

by a type of bacteria called *Neisseria meningitidis*. It can lead to meningitis (infection of the lining of the brain and spinal cord) and infections of the blood. There are at least 12 types of *N. meningitidis*, called "serogroups." Serogroups A, B, C, W, and Y cause most meningococcal disease.

There are also two vaccinations that are recommended for teens to get before college. One vaccine is meningitis vaccine ACWY which is recommended for 12-14 year olds plus a booster shot for 16 year olds. Chances are that you have received vaccine ACWY. The other vaccine is meningitis vaccine B which is much less common among teens and adults due to the fact that the vaccine was made in late 2014. The vaccine is suggested for ages 16-23 but preferred for 16-18 year olds.

Who is at risk?

According to the Centers for Disease Control and Prevention, anyone can get meningitis but certain people are at increased risk. One of the groups of people that are at an increased risk are adolescents and young adults 16 through 23 years old. Due to the increased risk, it is very important that rising college freshmen and 16 year olds are immunized.

How is it spread?

The bacteria that cause meningitis live within the nose and throat. The bacteria can be spread easily through behaviors such as coughing and sneezing, sharing drinks and eating utensils, kissing and living in close quarters. The meningitis bacteria can be spread easily and fast so it is important to be cautious if you have not been vaccinated.

What are the symptoms?

Early symptoms of meningitis may appear mild, similar to those of a cold or flu. However, the symptoms of meningitis can progress rapidly. Symptoms include headache, sudden fever and stiff neck.

It is very important that students receive their proper

vaccinations to reduce the risk and possible spread of meningitis.

FDA introduces regulations on flavored e-cigarettes

Flavored e-cigarettes have been all the rage for the past two years at AHS. JUUL, the most popular brand of flavored cigarettes among teens, has surpassed e-cigarette brands manufactured by the major tobacco companies in popularity. JUUL has become so popular that rather than referring to their use as “e-cigarette use” or “vaping,” it is referred to as “JUULing.” It seems as though teens are a major factor in the JUUL’s massive popularity.

According to the National Youth Tobacco Survey, approximately 2.1 million youth (which includes middle and high schoolers) were e-cigarette users. The number of youth using e-cigarettes, including JUUL, is alarming and raises serious health concerns that e-cigarettes could be an entryway to nicotine addiction and the use of regular cigarettes for some kids.

The JUUL company itself claims that the nicotine used is from “nicotine salts found in tobacco leaves” which they claim “accommodates cigarette-like strength nicotine levels.” The widespread teen use of e-cigarettes and their danger of addiction is reason for the FDA labeling the situation an “epidemic.”

JUUL faces allegations from the FDA that their popular flavored e-cigarettes are marketed to teens. From an outsider point of view, it is hard to believe that flavors such as

mango, cucumber and fruit are designed to attract adults. In an FDA statement from April, the FDA cites 1,300 retailers and 5 major manufacturers for violations related to youth sales of JUUL e-cigarettes. These retailers include smoke shops, 7-11's and gas stations. Although the retailers listed are one way for youth to access JUULs and other e-cigarettes, most teens get their JUULs online. The FDA also issued 12 warning letters to other online retailers that are selling misleadingly labeled and/or advertised e-liquids resembling kid-friendly food products such as candy and cookies. According to a statement made by the FDA on Sept. 12, "The FDA had previously issued more than 60 warning letters and fines to businesses that sold JUUL brand products to minors. The agency also recently sent letters to JUUL Labs and several other companies requiring them to submit important documents to better understand the reportedly high rates of youth use and the particular youth appeal of their products."

When asked where he gets his JUUL and JUUL products, Michael Brown said "I can't disclose that information. That is classified from the public." There are about four smoke shops in Annandale which are possible locations for teens to purchase e-cigarettes. The teens' ability to purchase depends on whether the store clerks check ID.

The first step to the growing problem of teen use of e-cigarettes resides with its accessibility. The next step to the problem includes the contents of a JUUL or other e-cigarette. Cigarettes contain nicotine along with other dangerous chemicals such as methanol and tar. Although JUULs and other e-cigarettes do not have the dangerous excessive chemicals, they contain nicotine which is the addictive element in cigarettes. Therefore, the combination of addictive content in a JUUL or other e-cigarettes combined with teen use introduces an early addiction of nicotine for youth.

Early addiction can cause serious problems for a developing mind. The effects of being addicted to nicotine can disturb

your daily life in school and at home. Not only can addiction affect school life but it can affect your life at home as well. It is a common scene at AHS to see students taking a JUUL break in between classes in the bathroom.

Taking time out of your day to JUUL reduces your time to complete homework and sucks time out of your social life. Additionally, the effects of vaping can affect your focus during and after school.

The worst part of the teen addiction to e-cigarettes has yet to come. If the user decides that he or she wants to quit, the process is an extreme challenge.

Junior Duc Ngo speaks about his process of quitting: "I have quit vaping, it was quite a bad experience," Ngo said. "It started with a slight uneasiness, in the second day of quitting, anxiety sets in.

The anxiety gets worse as the second day goes on. Stomach aches start to happen. You'll get very uncomfortable, your hands will shake, you will feel like throwing up."

Ngo also spoke about some of his own personal experiences with quitting in addition to the basic effects. "I tried making myself throw up but I didn't eat anything before because I was too anxious so I couldn't expel anything," Ngo said.

Finally, he added some reassurance to e-cigarette users that are thinking of quitting but not without heading warning to more intense users: "It all ends on the third day though, keep in mind my experience might be pretty average when it comes to severity," Ngo said.

To address the trend of e-cigarette use among teens, FDA commissioner Scott Gottlieb said in a statement, "We're expanding our Youth Tobacco Prevention Plan. It encompasses a series of steps to stop youth use of tobacco products, especially the rising use of e-cigarettes." The Youth Tobacco Prevention Plan incorporates three steps. These steps include

preventing youth access to tobacco products, curbing the marketing of tobacco products aimed at youth and educating teens and their families about the dangers of using any tobacco products. In addition to the Youth Tobacco Prevention Plan, the FDA released “The Real Cost” ads which educate teens about the dangers of using e-cigarettes.

In addition, the ads are designed to communicate to teens in a compelling way about the risks of using e-cigarettes. According to the FDA, in the first two years “The Real Cost” ads have prevented nearly 350,000 teens from initiating cigarette smoking.

The FDA clearly as a straightforward plan of action to prevent the selling of JUULs and other e-cigarettes to teens. JUUL or any e-cigarette containing nicotine can be addicting.

Senior Kassie Peralta can't go a day without using JUUL. “I would say no, because when I see it I'm tempted to use it,” Peralta said. “That's why I don't own one, I only borrow.”

Beat the flu before it beats you

Once again, the flu season is almost here. With school just starting, this means that the summer season will be coming to an end as well. This means that the days will begin to get shorter and the evenings will quickly get cooler as well.

With the start of cold weather, also comes deadly and sometimes, life-threatening germs, such as the Type A and B viruses that cause influenza, or most commonly known as the “flu.” However, it is not only the flu that you should take serious precaution in. You should also prepare for the common

cold.

Due to the overwhelming amount of stress that you are facing because of school, your immune system may be affected. Thus, making you weak and likely to fall victim to the cold, or even worse: the flu. Once this occurs, you will most likely be on best rest from a couple of days to even three weeks if you are unlucky enough to catch the flu. For these reasons, watch out for every sneeze and cough that comes your way, because you are at risk of contracting nasty viruses.

Many would ask you, "Have you had your flu vaccine yet?" One must admit that getting vaccinated should always be the first step in prevention. It is your best bet in battling the Type A and Type B bacteria. However, aside from vaccination, there are also many other precautions and preparations that can be taken. To prevent future sniffles and the piling of dirty tissues in your bedroom, follow these four unusual and straightforward steps to beat the flu and the cold before it begins.

No sharing

Do not share drinks, food, mascara or even chapstick with any of your friends. They may have a mild case of the flu or the cold that you are unaware of. Due to this possibility, you should take precaution in sharing germs and saliva with your best buds, unless you want to be knocked out in bed with a runny nose and red eyes right alongside them.

Use tiger balm

Forget the chicken noodle soup and blankets, tiger balm and eucalyptus oil are all you need. In many East Asian cultures, many use these two remedies to cure clogged up noses, stomach and body aches. It works like a charm. Not only does it give off a delightful scent, but it also warms up your body.

Prevent illnesses by rubbing it on your neck and chest every night.

Look, don't touch

Due to many students touching the handrails, lockers, and walls every day, there are a million germs on them. For this reason, make sure to not touch anywhere on your face after reaching any of these locations. Use hand sanitizer after touching anything. If not, head straight to the rest room to wash your hands with soap and water afterwards.

Bring on the pillows

Get a good night's rest by placing one or two pillows on top of one another. Propping your head up while you are sleeping assists in clearing up your nasal passages, ensuring that you are sneeze-free. Another benefit is that it is much more comfortable for your head and beneficial for your back and neck. Say goodbye to back pains and neck cramps.

JUST WAIT TWO MINUTES

On the morning of July 21, 2015, Charles Mauer and his 10-year-old daughter were on their way home from the Monticello library in Minnesota. As they got close to home, they were struck by a 17-year-old teenager who ran a red light. The cause of their untimely death? The teenage, Carlee R. Bollig of Little Falls, Minnesota, who was texting on her phone while driving.

Due to her negligence, she not only killed two human being,

but also faced four years' license probation and 240 hours of community service. This is a real situation that clearly demonstrates the outcomes that comes with texting and driving. Despite numerous public awareness campaigns, very few teenagers acknowledge that texting while driving is a dangerous and idiotic risk that is not worth taking. Luckily, the teenagers in Virginia know better than to ae the risk.

The Journal of Adolescent Health released a new report in August and the results look better than many would expect. The report found that Virginia's teenagers were behaving not only smarter, but also more safe in comparison to those in other states in the nation.

The study published that 38% of high school students admitted to being guilty of texting while driving.

Virginia only reported 31%, ranking to be the fourth state with the least teenagers that text while driving nationally.

"I feel much more safe on the road now knowing that teenagers in the state are acting responsibly while behind the wheel," senior Vinh On said. "We should continue to maintain and raise to higher levels."

Although, our state is practicing safe driving skills, that does not mean that other states are as well.

According to The Journal of Adolescent Health, 64% of teenagers in South Dakota admit to texting while driving.

The high percentage is due to many teenagers believing that sending text messages on their iPhones, sending snaps on Snapchat and checking the latest Twitter or Instagram posts is completely okay.

"There seems to be a stigma among younger generations being addicted to technology and it definitely appears to affect the driving of some individuals," On said.

Some teenagers may be willing to play the game of chicken, but senior Hansol Yoon is not one of them. Yoon has been a driver on the road for the past five months. Due to the extremely safe and careful driving skills that she puts into action, Yoon has never been in an accident. Unlike teenagers in South Dakota, she knows better than to test fate and risk her life.

“Not only are you putting yourself in danger, you are also putting others in danger just because you were impatient,” Yoon said. “It is selfish of people to text and drive. Not everything is about you; there are other people on this planet and there are others on the road who do not want to die.”

Despite the fines and even common sense for that matter, these reckless teenagers seem to never accept the concept that texting and driving is not a safe combination. According to a study conducted by the Ice Bike, about 11 teenagers die every day because they were texting while driving.

In a society that values technology so greatly, it is easy to understand the difficulty of keeping smartphones out of sight while driving. Teenagers today appear to be self-identified technology addicts.

Although we as a state are doing well in keeping our roads safe and secure, we must take action to further our progress and further our success.

5 myths about sunscreen to soak in

As the heat of summer intensifies and the amount of beachgoers increases, the authenticity of sunscreen is questioned by many. There are many common misconceptions regarding sunscreen that can significantly affect one's health. Here's the truth to many of the common myths about sunscreen.

1. You only need sunscreen on sunny days

Many people believe that they only need to apply sunscreen on sunny days; however, dermatologists at the Harvard Medical School have debunked this. The Harvard Medical School has

proven that even on cloudy days, people who spend a large part of their day outside can still suffer from sunburns that are detrimental to their health. People also believe that clouds provide them with protection from the sun's harsh rays, but this is also false. As the rays of the sunshine down, around 80% of UV rays reach Earth's surface and therefore have the ability to cause sunburns. "I use sunscreen whenever I know I'm going to be outside for too long," Senior Maryam Atique said. "Yes, [using sunscreen] is important because you don't want to get skin cancer."

2. You only need to apply sunscreen once

Numerous people also believe that only one application of sunscreen is sufficient for the entire day, but this is also not true. According to the Harvard Medical School, as people sunbathe, the sunscreen breaks down and does not sufficiently protect from the sun's harmful UV rays. Instead, people in the sun should reapply sunscreen every 2 to 4 hours in order to achieve maximum protection. "I put sunscreen every day because I have very sensitive skin and need a prescribed sunscreen to prevent my skin from burning," Senior Sarah Sahal said. "Sunscreen is an important tool to help prevent skin cancer."

3. Using sunscreen prohibits one's body from absorbing and producing vitamin D

Vitamin D, which is a nutrient that is produced through sun exposure, is very important to one's health. Although many people have the misconception that wearing sunscreen prevents the body from producing vitamin D. In theory, if someone applied sunscreen all the time, this would prevent his or her body from producing vitamin D; however, when someone is in the sun, their sunscreen generally wears off, which allows vitamin D to be produced. "You may have been taught that you need sunlight for your body to make vitamin D because vitamin D is not found naturally in most foods," Sahal said. "Today, many foods make vitamin D during the manufacturing process. Thus,

sun exposure is not as important for the body's vitamin D supply as it used to be."

4. You do not need sunscreen if you have dark skin

Although people with more melanin in their skin may receive more protection against sunburns, they still need to apply a full layer of sunscreen. Melanin can diffuse UVB rays from the sun, which may reduce the chance of someone with darker skin receiving a sunburn. On the other hand, melanin does not shield from UVA rays, which are known to cause wrinkles and age skin prematurely. Additionally, the Harvard Medical School states that melanin does not protect one from skin cancer "Of course, being outdoors makes most people feel good, and playing tennis is better for your health than being in your room on your phone," Sahal said. "You can still protect yourself from the sun's damaging effects while enjoying yourself outdoors."

5. Sunscreen is toxic

Many also believe that ingredients in certain sunscreen brands are carcinogenic, or cause cancer. Although some sunscreen brands may contain chemicals with negative effects, there is no significant link between these chemicals and any detrimental health effect. In the United States, the FDA thoroughly regulates the chemicals used in sunscreen, which makes the majority of sunscreen safe to use. Senior George Sandy also stated, "I have been sunburned multiple times within my lifetime, especially because I usually sweat the sunscreen off. The way I prevent it is by wearing a shirt when I am not in the water, wearing a hat, and most importantly applying sunscreen to my whole body." Through the use of sunscreen, people can safely have fun in the sun without risking their health.

Four healthy uses of activated charcoal

The word “coal” probably makes one think of barbecues or Santa’s naughty list, until recently. Say hello to activated charcoal, the beauty ingredient of the millennium.

From charcoal facial masks to teeth-whitening treatments, activated charcoal is leaving its footprint everywhere. It has also been used in hospital emergency rooms for years to treat alcohol poisoning and drug overdoses.

Unlike regular charcoal, activated charcoal is medicinal. It is a byproduct of burnt wood, peat and coconut shells. This ingredient comes in various forms, including powder, pills and sponges or fabrics for cleansing.

This “it” ingredient has recently been popularized on social media for its potent alkalizing detoxification properties and its health benefits. According to a Journal of Artificial Organs study, activated charcoal beads has a diverse number of advantages when it comes to your skin, stomach, and teeth.

There are many uses for it, but here are four common and safe uses of activated charcoal!

1. Face Masks

These black goo face masks are taking over Instagram. Activated charcoal is a magnet for toxins that clog pores, including dirt, oil and other impurities. It is especially useful for removing blackheads. Apply the mask and wait to dry, then peel off.

2. Teeth Whitening

Activated charcoal teeth can lift surface stains from coffee and tea. Dip wet toothbrush into the powdered charcoal, covering the toothbrush. Brush gently in small circles for about two minutes, spit carefully without ingesting it and rinse well.

3. Shampoo

The natural ingredient heals and soothes flaky scalps. It also strengthens and reinforces chemically treated or damaged hair and provides nutrients to the hair follicle to support healthy hair growth. Apply to wet hair. Massage into a lather and rinse.

4. Deodorant

Activated charcoal, mixed with essential oils, works as an extremely efficient deodorant. The ingredient does not irritate the skin. Under the arm, it sucks up nasty odors and keeps you smelling fresh. Simply, apply products with the ingredient on the armpits.

Virginia: the capital of STDs

Imagine you are having one of those romantic nights with your significant other, or even just a one night stand. The mood is set and you are ready to swing into action. But then something

comes up. You forgot the condom! You either have to make a quick run to the store or just not use a condom this one time. You're in the moment, this one time may seem harmless. However, you should take a second to rethink it.

Here is a scary and eye-opening fact that will make you think twice before having unprotected sex: according to the Centers for Disease Control and Prevention, there are more than two million chlamydia, gonorrhea and syphilis cases reported across the nation just this year.

So what is the trick to not contract one of these three sexually transmitted infections, or STIs? The answer is simple. It comes precisely from what you learned in your sixth grade F.L.E. class: practice safe sex and stay up to date on tests.

The CDC released a report in April, and it is anything but pretty. The report states that the number of Americans contracting sexually transmitted diseases (STDs) is about to reach epidemic levels this year alone. And what state is the forefront of the problem? Virginia.

Cases of the three STDs have increased since 2006, according to the data released by the CDC. Washington D.C., specifically, has the highest rate of syphilis in the United States with 84.5 cases per 100,000 people. Virginia, on the other hand, has 15.5 cases per 100,000 people.

Syphilis itself starts as a painless sore. However, when left untreated, it will cause rashes, swollen lymph nodes and fevers within six weeks. Among severe cases, syphilis may cause damages to the heart, brain, nerves, eyes, joints, bones, liver and blood vessels.

In regards to chlamydia, Virginia was ranked No. 24 with a rate of 473.2 cases per 100,000. Sadly, Washington D.C. has reported with the highest percentage once again. Of the total 1,008,403 reported cases among the entirety of the nation,

63.1% of the cases were persons ages 15-24 years.

“The state should consider raising even more awareness on this topic to reduce the severe statistics,” junior Maria Cisneros said.

Richmond, Virginia, has been in the top 20 cities in the nation for STDs/STIs for years now.

However, the Norfolk area, including Virginia Beach, has broken through to the top 10 STD-infested cities in the country. This is not exactly something you expect to read about happening in your home state.

Like many students, junior Abbey Yared is filled with astonishment when reading the report. He questions why the state has allowed for such catastrophic STD rates to remain and wonders what the state will be doing in the future to bring these levels down.

“Students should consider sharing their experience, if they are comfortable, in order to help their classmates understand that STDs are a common reality that they can encounter if they are not careful,” Cisneros said.

Contracting STDs can be extremely damaging to your life. While some of these diseases can be cured, many last an entire lifetime. Once contracted, there is no undo button.

All three of these diseases can be cured with antibiotics, but if left untreated, there can be serious health consequences: infertility, pelvic damage, and organ damage. However, it is entirely preventable.

“Parents need to educate their kids about sex, especially safe sex,” junior Kassie Peralta said.

With these recent findings in mind, it is safe to say that protected sex is the best type of sex. So before diving right in, think about the consequences.

The fight against dandruff

As I took a whiff of the tea tree oil, I was hit by its distinct and robust scent. Suddenly, a wave of anxiety hit me. What if it ruins my hair? What if it causes even more dandruff? These were some of the many questions that ran through my mind as I mixed the ingredients into a plastic bowl.

Everyday, for the next seven days, I applied a homemade remedy of tea tree oil based shampoo to my hair. I was clueless of how my experience with this experiment would be like and did not have any high expectations.

I first discovered this new and upcoming trend when I was going through the “Discover” section of Snapchat. I read an article about how tea tree oil is now commonly used to treat dandruff. The concept and idea seemed straightforward, yet simple enough to make and follow.

Since I was suffering from a bit of dandruff after recently dyeing my hair, I decided to take a leap of faith and give tea tree oil a shot. My scalp was extremely dry already, so why not?

Not even after a week of learning about the tea tree oil shampoo, I went onto Amazon for some shopping. I added all the materials necessary for making the tea tree oil shampoo into my shopping cart and hit the “Place your order” button. The anxiety inside me was building up, as the shipment came closer and closer to my house. I had to see for myself if the homemade shampoo would change my hair and bring forth positive results.

After two long days of waiting, it finally arrived. I quickly

mixed the ingredients together and poured it into a plastic container to rapidly shake, ensuring that it was mixed well. While applying it to my wet hair, I found the solution to lather very well. It honestly lathered more than all of the other shampoos and brands I used in the past, such as Pantene or Aussie.

While I did not notice a significant difference, I did see some results. After using the product as directed, I found the previously dead and limp locks to be slightly more smooth and silky. My hair was also somewhat shinier, more manageable and had a decent amount of volume. My roots seemed to be more oily later in the day than it used to be.

It took me a while to adjust to the scent since tea tree oil was strong-scented. It was incredibly frustrating because my hair was left smelling like a nasty mixture of tea tree and coconut. This was by far the least pleasant scent. However, this is just a personal preference since I am more a vanilla type of girl.

After the second and third use, I saw a slight contrast to the first day. Running my fingers through my hair, there were no longer any tangles. Each strand felt stronger and thicker. Surprisingly, it worked like magic in that aspect.

However, this is where my compliments on the treatment end. As the third day passed on, I began to notice that my dandruff had multiplied. There was even more than before. Only mere hours ago, I thought the product was my holy grail, but it turned out to be the exact opposite. The dandruff had spread to the front of my head and had also increased in size. Despite this, I continued its use. I was not going to give up on the tea tree oil just yet.

On the fifth day, the large, white flakes had lessened a little, but it was still more than I initially had before using the product. My hair did feel smoother, similar to the

first use. It was honestly pleasing to see that the product at least did something.

As the week was nearing to an end, the results were similar to the fifth day. There was no change, and I was beginning to give up hope on the so-called remedy for dandruff. By the end of the week, I was left with complete and utter surprise. The dandruff had lessened.

I later discovered that there were different types of homemade tea tree oil shampoo. Depending on the specific hair types (fine, dry and damaged, or oily), it contains certain ingredients found in the shampoo for those hair types. The one I made was meant for fine hair, which I do not have. This may be one of the causes that the product did not come up to par and have immediate results.

Despite the elaborate timing it took to treat my dandruff, I still genuinely recommend the product for others to use. The materials are both inexpensive and easy to find.

Overall, the product was not precisely life-altering, but it had excellent results in other aspects. One of these aspects include reviving my once dry, dark locks to shiny, smooth. I had finally found a reliable shampoo to use.



The tea tree oil used in the shampoo.