

Chemical Health

Alcohol

Alcohol is a colorless, flammable liquid containing ethanol, that can have intoxicating effects on the body.



Short Term Effects:

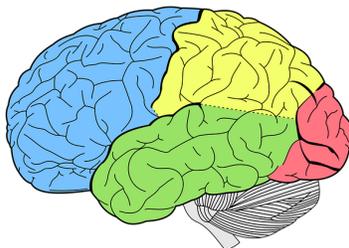
- Injuries due to falls, burns, drownings
- Medical emergencies, due to too much alcohol in the blood (alcohol poisoning)
- Violence

Long Term Effects:

- Cardiovascular disease
- Addiction
- Learning and memory problems
- Mental health problems
- Social problems
- Cancer

Performance Effects:

- Alcohol use reduces REM cycle deep sleep causing your body to be incapable of reaching the stages of sleep that support long term memory, muscle repair, and body recovery.
- 1 night of drinking can lead to 14 days of lost training effect.
- Alcohol decreases the rate at which your body is able to absorb nutrients and use them as fuel for up to 36 hours after binge drinking.



Marijuana

Marijuana, also known as cannabis, comes from the hemp plant that contains the mind-altering chemical, THC. Marijuana is consumed by smoking, vaping and eating edibles.



Short Term Effects:

- Attention problems
- Memory and learning problems
- Affects on relationships and mood

Long Term Effects:

- Brain development problems
- Attention reduction
- Memory loss
- Decreased problem solving ability
- Drop in IQ up to 8 points
- Mental health problems
- Addiction

Performance Effects:

- Marijuana significantly slows down reaction time even for basic daily tasks.
- The THC in marijuana deposits itself all throughout your body-impacting regulation of memory, motivation, cognition, reward system, sensory perception, emotions, motor control, movement memory, and coordination.
- Cannabinoids, found in marijuana, increase the secretion of somatostatin which blocks the human growth hormone (HGH), the hormone responsible for growth and repair.

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Vaping

Vapes are electronic devices used to inhale aerosol containing nicotine, flavorings and other chemicals.

Short Term Effects:

- Attention and learning problems
- Negative impacts on academic performance
- Risk of poisoning

Long Term Effects:

- Nicotine addiction
- Disruption of brain cell development that control attention, learning
- Scientists are still studying

What is in Vape Juice?

- Nicotine
- Toxicants
- Diacetyl, a chemical linked to serious lung disease
- Benzene, found in car exhaust fans
- Heavy metals such as nickel, lead and tin



Prescription Drugs

Medications prescribed by a doctor to treat diseases.

Some drugs affect the brain, like those that treat pain or anxiety.

Misuse is when someone takes a prescription drug without a

doctor's prescription or in a way or

amount that was different than what was prescribed.

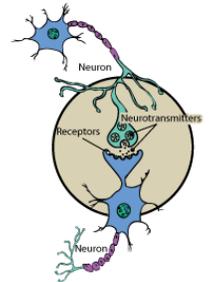


Short Term Effects:

- Nausea
- Vomiting
- Headache
- Muscle ache
- Trouble Concentrating
- Dizziness
- Sleepiness

Long Term Effects:

- Addiction
- Changes in the nervous system
- Increase in Blood Pressure
- Irregular Heart Rhythm



What are the Effects of Drugs on the Brain?

- The brain is made up of about 100 billion neurons which communicate with each other by using chemical messengers called neurotransmitters which deliver their messages by attaching to special places on nerve cells called receptors. When you misuse prescription drugs they mimic certain neurotransmitters.
- Prescription painkillers affect the part of the brain that controls respiration, which can cause a severe decrease in breathing.
- After suddenly stopping the use of drugs, the brain will experience withdrawal and symptoms include anxiety, shakiness, headache and dizziness.