

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY



Reading/Science

Q & A—Part One

Why? . . . How? . . . Left with questions after looking at our poster?
Check out Part One of our Q & A on the brain, heart, lungs, and liver below. Then, check out **Part Two** on p. 6.

BRAIN

Q: Why does it matter if the brain shrinks?

A: The effects of brain atrophy (shrinkage) may include difficulties with learning, thinking, remembering, and coordination.

Q: Which brain cells does **methamphetamine** attack?

A: **Methamphetamine** use damages brain cells that contain the chemicals dopamine and serotonin. Over time, the drug causes reduced levels of dopamine, which can result in symptoms similar to those of Parkinson's disease, a severe movement disorder.

Q: How does **marijuana** affect memory?

A: THC, the active ingredient in **marijuana**, deadens the neurons in the hippocampus, the part of the brain that's in charge of short-term memory.

HEART

Q: How does **cocaine** use cause heart attacks?

A: **Cocaine** makes blood vessels narrow and tight, which can cut off blood flow to the heart.

Q: Why do **inhalants** disrupt heart rhythms?

A: The chemicals in **inhalants** work on the part of the brain that controls the heart beat. When a heart attack and death results, it's called Sudden Sniffing Death Syndrome (SSDS). SSDS can occur even in first-time sniffers.

LUNGS

Q: What happens to lungs coated with sticky black tar?

A: The tar clogs the air sacs, blocking the flow of oxygen. The tar and other chemicals in smoke can also damage healthy lung cells, so that tumors can grow. The result: lung cancer or emphysema.

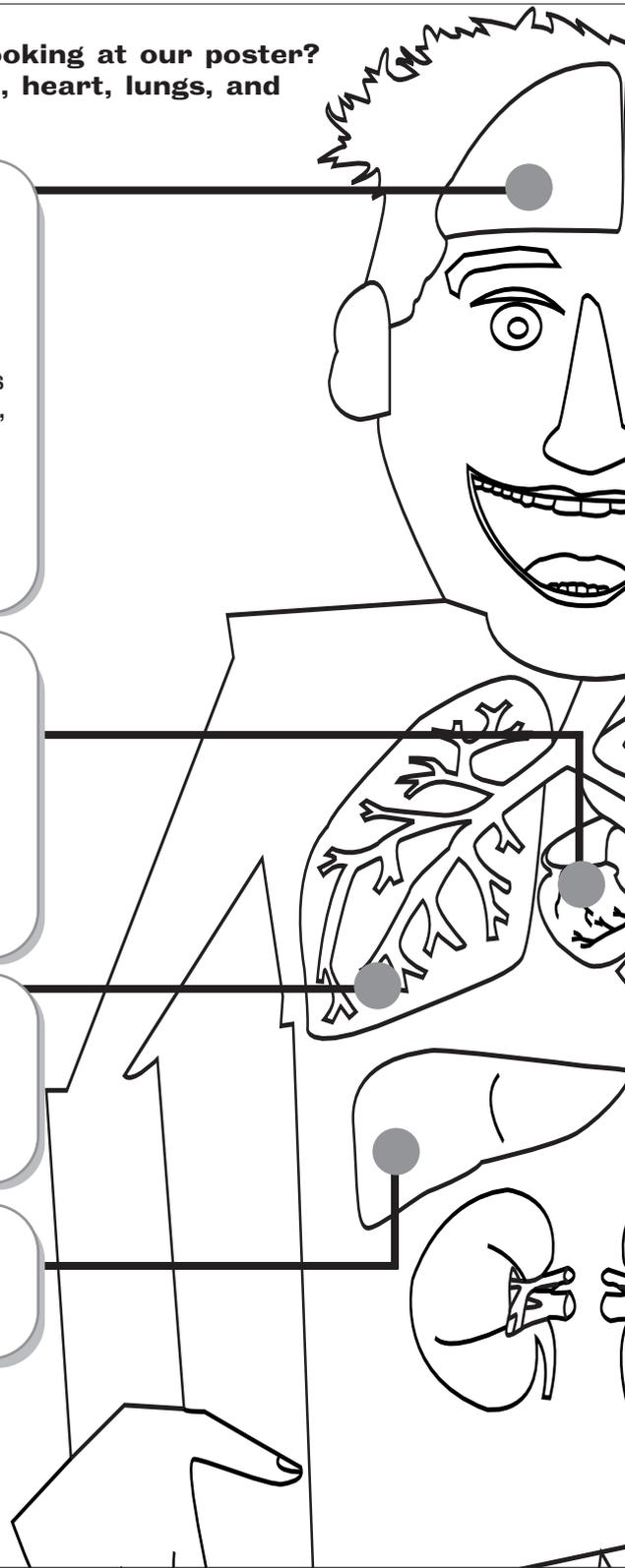
LIVER

Q: What are other dangers to the livers of **steroid** users?

A: **Steroid** use can lead to liver cancer.

*Still have questions? Fantastic!
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www.scholastic.com/headsup or
www.drugabuse.gov



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Q & A—Part Two

Here's the other half of the story. Your questions on the mouth, skin, bones, and kidneys are answered here.

MOUTH

Q: How does **ecstasy** cause teeth clenching?

A: **Ecstasy** works on the part of the brain that sends messages to muscles. It can cause muscle spasms, including spasms of the muscles of the jaw.

Q: Why do drugs cause the blahs?

A: When something makes you feel good, your brain produces dopamine, a chemical which turns on the pleasure circuit in your brain. But **all the drugs of abuse** pump so much dopamine into the brain that receptors shut down.

SKIN

Q: Why do **steroids** cause zits?

A: **Steroids** cause the balance of hormones in the body to be disrupted. This can lead to skin problems including acne and oily skin.

BONES

Q: How do **steroids** stunt your growth?

A: **Steroids** create high levels of hormones that wouldn't naturally occur until early adulthood. The hormone glut signals bones to stop growing, so that young steroid abusers never reach their full, adult height.

Q: Why does marrow matter?

A: **Inhalants** damage the marrow inside of bones, which manufactures the red blood cells that carry oxygen to muscles and organs, including the brain.

KIDNEY

Q: How does **ecstasy** cause body temperature to soar?

A: **Ecstasy** acts on the hypothalamus part of the brain. There it ramps up heart rate and blood pressure and disrupts the brain's ability to regulate body temperature. This can lead to a potentially fatal heat reaction called hyperthermia, which can lead to kidney failure and death.

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