

crossing

the line

By Joshua Kors

Jon Rossman* was one of the top students in his class before his life ran off the rails. In middle school he discovered alcohol, then marijuana. After he got his driver's license at 16, he and his buddies started driving south from San Diego to score illegal drugs across the border in Mexico.

"Tijuana was just swimming in drugs," he says. "You'd have 10-year-olds who were high on *methamphetamine*, their pupils bigger than marbles, running up to you to sell key chains, flowers, whatever they could get their hands on. We'd load up our car with drugs and drive it home. Then we'd sell the stuff at our school." Methamphetamine, or meth, is a powerful *stimulant*, a drug that temporarily speeds up activity in the body.

In college, Rossman became a full-blown methamphetamine addict, and his life collapsed. "People could tell something was wrong," he says. "I stopped eating, got really skinny, and started staying up for five days at a time. My skin started to deteriorate. I just wasn't myself anymore."

It wasn't until recently that Rossman began thinking about the wide web of corruption and violence that his drug use was part of. (See "Bad Appetite," page 12.) But the damage that the drugs were doing to him was obvious from the beginning, he says.

BRAIN DAMAGE

Joanna Fowler, a chemist at Brookhaven National Laboratory, has spent her career examining

brain damage in drug addicts. She and her research partner, Nora Volkow, director of the National Institute on Drug Abuse, study the effects of meth, cocaine, and heroin.

Those drugs, explains Fowler, destroy the *frontal cortex*, the brain's judgment center. That destruction can lead addicts to make bad decisions. In teenagers, the damage is especially harmful.

Illegal drug use damages more than a user's body and mind.

"The adolescent brain is more vulnerable to the effects of drugs because it's still growing," says Fowler. "You don't have a full frontal cortex until your 20s."

Cocaine and meth also harm a small clump of cells in the middle of the brain called the *ventral tegmental area (VTA)*. "When a healthy person gets excited, the VTA releases a chemical called *dopamine*," says Fowler. A rush of dopamine induces feelings of great pleasure. In a healthy brain, that rush may be triggered by a

delicious meal, the receipt of a gift, or "any fun activity," she says.

Many illegal drugs trigger a powerful dopamine surge in the brain, leaving the user feeling *high* (euphoric). But the flood of dopamine can be so strong that it damages the dopamine system. "After using drugs, the damaged dopamine system doesn't produce dopamine and transmit the signals of reward the way it used to," Fowler says. "Activities that used to be fun seem less exciting. The world becomes more gray."

Because of that damage, a higher dose of the drug is needed the next time to stimulate the dopamine system. But each subsequent dose further harms the activity of the VTA cells, decreasing their ability to create the joy-producing dopamine. A vicious cycle of higher doses and greater damage ensues.

Rossman says his addiction followed that pattern. "The first time I did meth, I was at a party. I just wanted to try it," he says. "You take a little, and you're awake, you're high, you're giddy." Soon he found that he needed more and more of the drug to achieve the same high.

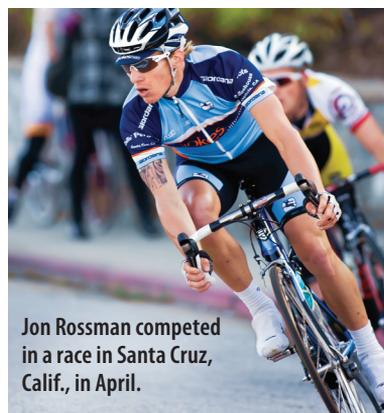
Within a few years, Rossman was taking doses of meth so big that they revved up his neural pathways to a level that induced extended *insomnia* (sleeplessness) and *hallucinations* (imaginary perceptions). "I was basically going crazy," he says. "I was seeing spots and thinking there were bugs all over me. I remember crawling around on the floor picking up lint, thinking it was drugs. It was an awful time."

CLEAN AND FIT

Today, Rossman, 25, lives several hundred miles from Mexico. Thanks to a stint in rehab, his drug days are a long way behind him. He says he feels lucky to be among the small percentage of addicts who learn to kick drugs and stay clean. Once scrawny and sickly, he has become one of California's elite cyclists, competing in about 20 races a year.

"I did drugs because I felt like I didn't fit in, and the drug culture looked like it offered these instant friendships," he says. "Now, with biking, I've found real friendships, real community."

To anyone who may be thinking of trying drugs, he says, "Look at who you are today. Drugs change you completely. Once you take them, you'll probably never get to see that person again." **CS**



Jon Rossman competed in a race in Santa Cruz, Calif., in April.

Bad Appetite

U.S. demand for illegal drugs is stoking Mexico's drug war.

Jon Rossman is just one of millions of Americans who have consumed illegal drugs imported from Mexico. That trade is run by *cartels*, large criminal organizations of producers, transporters, and dealers.

The power of the cartels has become gruesomely apparent in recent years, as the Mexican government has cracked down on their activities. The cartels have fought back, sparking a bloody war in the nation's streets. More than 23,000 people, many of them bystanders, have died in the conflict since 2006. That's when the Mexican government, encouraged by the

U.S. government, began cracking down on the cartels.

Mexico's drug cartels take in about \$23 billion a year, much of it from American users, says John Hart, a professor at the University of Houston and an expert on Mexican history. Hart spent time in the Sierra Madre Occidental, a mountain range in the northern Mexican state of Chihuahua. He watched teenage boys armed with AK-17 rifles transport drugs to a nearby *mesa* (a flat-topped, steep-sided desert mountain), where the cartels' pilots were waiting. "It's so risky, the parents cry and pray for [the boys]. And if the boys come back alive, the parents have a reception to celebrate," Hart says. "The problem is the people are so poor and the money is so big."

Hart says that the effort by the U.S. and Mexican governments to crack down on the drug trade has touched off a mad scramble by the cartels for territory and shares of the drug market. "Now the cartels—La Familia, the Federation, the Gulf

Cartel—they're fighting each other for position, fighting the government, and fighting local bandits who want the drugs," he says. "So you have layers and layers of violence."

Making matters worse, adds Peter Andreas, a professor of international studies at Brown University, is the easy availability of guns in the United States. The cartels have exploited that availability to equip themselves against the police. "It's a nightmare scenario," he says. "We're sending them guns. They're sending us drugs. We're sending them money for the drugs. They're using that money to buy guns, corrupt police, and generate wealth."

Amy Isackson, a reporter for KPBS radio in San Diego, has covered the U.S.-Mexico border for years and watched Mexican drugs make their way into American hands. She says most Americans who use drugs never pause to think about where those drugs come from.

"They think about getting [drugs] from a friend or a friend's friend. But those drugs don't magically appear. Chances are they came from Mexico," says Isackson.

"There's a real disconnect. People who are buying drugs on the street have to put this in a larger context.

"It would be too dramatic to say that anybody who smokes pot has blood on their hands, [but] in a sense it's true: It's U.S. demand that's fueling this war in Mexico."



U.S. military personnel carry bags, allegedly containing cocaine, that were seized in Mexico.