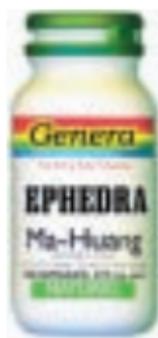


Ephedrine

■ **Overview:** For an ancient drug, changes have been swirling hot and heavy around ephedrine lately. Why? Mostly due to the chemical company it keeps. That's because ephedrine is chemically similar to methamphetamine, and has figured into the illicit production of that drug for years. Once a main ingredient in legally-available energizers and nutritional supplements, ephedrine was banned in those products by the U.S. Food and Drug Administration in 2004. Then, in 2006, controls on both ephedrine and a synthetic form of the drug, pseudoephedrine, were tightened nationally to restrict their availability as precursor chemicals in meth manufacture.



■ **Appearance:** In its pure form, ephedrine is a white powder, but it's also sold in tablet or capsule form or as loose plant material.

■ **Actions/Effects:** Ephedrine triggers a mild burst of energy, due to its similarities to the body hormone epinephrine (or adrenaline) and the street drug methamphetamine. In addition to its stimulant effects (which can include feelings of alertness and reduced appetite), ephedrine also relaxes bronchial muscles and dilates airways, and can cause sharp increases in both blood pressure and heart rate.



■ **Medical Uses:** Due to its effects on respiration, ephedrine has long been used as an ingredient in over-the-counter cold, allergy, and asthma products.

■ **Side Effects:** Common side effects include increased body temperature, sweating, dry mouth and tremors. Higher doses may cause dizziness, restlessness, anxiety, and insomnia.

■ **Risks:** Users who are sensitive to ephedrine or who take high doses may experience potentially-serious health risks, including abnormally high blood pressure, breathing difficulties, and rapid, irregular heartbeat. These effects may be accompanied by confusion and paranoia. An amphetamine-like psychosis has also been linked to chronic abuse of high-dose levels of the drug.



Ad for herbal "ecstasy."

■ **Trends:** Despite numerous deaths linked to ephedra-based products, national debate on the subject never reached critical mass, until now. Following the 2003 ephedrine-related death of a Major League Baseball pitcher, the FDA began to overhaul the *1994 Dietary Supplements Act* to include much-needed regulatory authority, standardized dosage, content and warning labels. And not a moment too soon, according to a study by the Rand Corporation: It points out that, while ephedrine-containing products account for only 1 percent of dietary supplements sold in the U.S., 64 percent of complaints to the U.S. Food and Drug Administration are linked to ephedrine.



This is one in a series of fact sheets on drugs and health published by Do It Now Foundation. Please call for a complete list of titles—or visit our web site at www.doitnow.org.



Do It Now Foundation

Box 27568 ■ Tempe, AZ 85285-7568 ■ 480.736.0599