Nicotine

Drug Classification: Stimulant
Drug Schedule: I
Addiction Potential: High

Modes of Administration
Oral (chewed)
Inhalation (smoked)

Onset of Drug Effect(s)
People think that tobacco tastes good, feels good and looks cool. On the downside, tobacco has over 4,000 harmful chemicals in it that can cause things such as colds, coughing, loss of sense of taste and smell, premature wrinkles, problems with sleeping, mouth sores, and smelly clothes and hair!

Some think that chewing tobacco is safer, but it’s not true. Smokeless tobacco can cause bleeding gums and sores of the mouth that never heal. Eventually you could end up with cancer.

When tobacco is smoked, nicotine is absorbed by the lungs and quickly moves into the bloodstream, where it is circulated throughout the brain. Nicotine reaches the brain in roughly 8 seconds after someone inhales. Nicotine can also enter through mucous membranes that line the mouth (when chewed) or nose (when snuffed), and even through the skin.

Drug Action(s)
Nicotine affects the entire body. It acts directly on the heart to increase heart rate and blood pressure. It also acts on the nerves that control respiration patterns. In high concentrations, nicotine is deadly. In fact, one drop of pure nicotine on the tongue will kill someone. It is so lethal that is has been used as a pesticide for centuries.

The nicotine molecule is shaped like the neurotransmitter acetylcholine which it attaches to and mimics. As such, nicotine impacts muscle movement, heart rate, learning and memory. They also impact the subsequent release of other neurotransmitters and hormones that affect mood, memory, appetite, and more.

Nicotine also activates several areas of the brain that produce feelings of pleasure and reward. Scientists recently discovered that nicotine actually produces increased levels of dopamine in the areas of the brain that directly control the experience of pleasure. Researchers are beginning to believe that this increased level of dopamine in pleasure centers of the brain contribute greatly to addiction and may explain why nicotine is such an addictive drug.