



Your Employee Assistance Program is a support service that can help you take the first step toward change.

## The Effects of Tobacco

Nicotine is a highly addictive substance because of the way it makes us feel, both emotionally and physically, and because the way we obtain nicotine becomes a normal part of our daily lives. When most people think about serious addition, they think of cocaine or heroin addiction, but tobacco is also a highly addictive substance that is hard to eliminate from your life once you've started using it. When a person becomes addicted to smoking, they smoke in order to achieve the physiological (physical) and psychological (mental) satisfaction that smoking provides. Unfortunately, smoking-related satisfaction is very short-lived and new cravings develop quickly. Recognizing the nature of your addiction, including the physical and psychological cravings, can help you to identify and prepare for the difficulties you might face while you are in the process of quitting.

### Physiological Effects

The pleasurable consequences of smoking are considerable, and they affect the mind as well as the body. One of the main reasons that people become addicted to nicotine is because it activates the pleasure center of their brain. The average smoker takes about 10 puffs on every cigarette, and nicotine levels in the brain peak within 10 seconds of inhaling. Since the satisfaction one gains from smoking lasts only a few minutes, smokers soon crave another cigarette. If one cigarette supplies approximately 10 surges of nicotine to the brain, smoking 1½ packs of cigarettes a day provides a smoker with approximately 300 nicotine hits.

Some people say that smoking relaxes them while others say that it gives them a boost. According to the National Institute of Drug Abuse, nicotine does both—it acts as both a stimulant and/or a sedative depending on the dose and the smoker's history of tobacco use. A hit of nicotine stimulates the adrenal glands, which cause the release of adrenaline. This adrenaline stimulates the body and causes a release of glucose, as well as an increase in respiration, blood pressure, and heart rate. Nicotine also causes the release of dopamine in the part of the brain that controls pleasure and motivation. A similar effect is caused by cocaine and heroin and is believed to cause the pleasurable sensations reported by many smokers.

Frequent use of tobacco products results in addiction to nicotine, and repeated exposure to nicotine results in the development of tolerance for the drug. As tolerance builds, it takes a higher dose of nicotine to produce the same level of stimulation. A similar reaction takes place in people who consume alcohol—the more often you consume alcohol, the more you need to drink to feel the effects. Nicotine is metabolized rapidly, which means it disappears from the body completely in just a few hours, so smokers need to smoke more and more often to continue to feel the same pleasurable effects.

Addiction to nicotine is the reason many smokers find it difficult to quit. When a smoker tries to quit, he or she often experiences withdrawal symptoms, including depression, irritability, difficulty concentrating or sleeping, headache, and tiredness. Many people find it to be too painful to try to overcome withdrawal symptoms, and choose to face the risks instead of quitting.

### Psychological Effects

Psychological factors are often one of the reasons that breaking the nicotine addiction is so difficult. For many smokers, the act of smoking has become such a part of their lives that they feel like they have lost a part of themselves when stop smoking. Psychologically, it is normal to mourn the loss of such a familiar habit. It is also common for people who give up smoking to experience one or more of the

common stages of grief (denial, bargaining, anger, sadness, guilt, and acceptance) as they learn to change the way they live. If you find yourself experiencing any one of these emotions, recognize that it is normal and okay, that many people must work through these stages on the path to quitting, and that you, too, can successfully work through each stage.

## **Behavioral Components**

In addition to overcoming the physiological effects of nicotine, smoking cessation is often difficult because you have become so accustomed to the behavioral aspect of smoking. Habitual smokers can identify the places where they usually smoke, or circumstances that make them crave a cigarette. Without even thinking about it, many people reach for a cigarette after finishing a meal, while driving their cars, or when dealing with a stressful situation. In fact, habitual smokers may even feel uncomfortable if they find themselves facing any of these situations without a cigarette.

It is very easy to associate the feel, smell, and sight of a cigarette; the rituals associated with smoking (obtaining the cigarette, handling the cigarette, looking for a lighter and actually lighting the cigarette); and the times and places you smoke with the pleasurable feeling you get from smoking. These connections are formed by a process called classical conditioning, which was discovered by the Russian scientist Ivan Pavlov (of "Pavlov's dog" fame). Pavlov's famous experiment was conducted to see if he could train dogs to salivate when they heard the sound of a bell. At first, Pavlov only rang the bell when he fed the dogs, knowing that salivating while eating is a natural reaction. Soon, he was able to make the dogs salivate just by ringing the bell, even if there was no food present. The dogs had learned that the ringing bell signaled that food would be coming soon; their normal response to food had become transferred to the sound of the bell. Similarly, smokers learn to associate the pleasures of smoking with all of the daily activities they usually perform while smoking. For example, if you smoke while drinking a cup of coffee, the sight and smell of a cup of coffee could trigger the craving for a cigarette or make the craving worse. Since you probably smoke many cigarettes over the course of one day, many such connections are made. If you smoke while driving to work, getting into the car can result in a craving for a cigarette. If you smoke while having a drink after work, then having a drink can make you want a cigarette. You need to identify and plan for all of the places and behaviors you associate with smoking before you will be able to entirely quit using tobacco. Once you've identified your triggers (those people, places and things that trigger your craving for a smoke), you can change your routine and substitute different behaviors, so you can eliminate the connection between the triggers and smoking. In order to be successful, you must learn to deal with physical cravings and you must change your environment or your habits in order to avoid your triggers.