Substances That Can Cause Heart Rhythm Disorders

Thousands of substances may affect the heart’s electrical system and change its ability to pump blood through the body.

Many illegal, prescription, and over-the-counter drugs, as well as alcohol, tobacco, certain foods, and other substances, can affect the electrical signals that trigger the heartbeat.

Caffeine, Diet, and Heart Arrhythmias
Caffeine is the most common substance linked with abnormal heart rhythms (arrhythmias). Some people feel heart palpitations (fast heartbeats) when they drink coffee or tea or eat chocolate. Red wine and eating too much can bring about symptoms in others.

Substance Abuse:
Drugs and Inhalants
Abusing legal or illegal drugs can lead to dangerous arrhythmias.

Alcohol
Small amounts (no more than one drink a day) of alcohol may lower the risk of heart problems and increase "good" cholesterol (HDL cholesterol). But for some people, alcohol can cause heart rhythm disturbances. Alcohol abuse is a major risk factor for high blood pressure, cardiomyopathy (weak heart muscle), heart failure and stroke.

Tobacco
Tobacco (cigarettes) causes more heart and blood vessel disease, stroke, and heart-related deaths than all illegal drugs combined. It contributes to as much as one-third of all heart disease.

Dietary Supplements and Over-the-Counter Medications
Some herbs and other substances used in over-the-counter remedies can cause abnormal heart rhythms. Diet pills can be especially dangerous. Patients should always talk to a health care provider before starting a new medication or supplement.
Cigarette smoking contributes to as much as $\frac{1}{3}$ of all heart disease.

**Prescription Drugs**

While most medicines prescribed by doctors are beneficial to health, some can cause serious side effects.

Certain medications commonly prescribed for arrhythmias, heart disease, and high blood pressure can themselves cause problems, including heart rhythm disturbances. Patients should watch for symptoms and discuss any changes with a doctor or health care provider.

**Substances in the Environment and Workplace**

Hundreds of substances in the environment can cause arrhythmias, heart disease, and death. In general, the people at greatest risk are those who handle or come into contact with dangerous substances in the workplace. Some of the substances that can cause problems are: automobile emissions, cigarette smoke, pollution from industrial plants, paint thinners, and propane gas.