

## **MOSQUITO COIL AND YOUR HEALTH!!!!**

Mosquito coils are widely known as an efficient mosquito repellent. The major active ingredients of mosquito coil are pyrethrins, accounting for about 0.3-0.4% of coil weight. Pyrethrins are natural insecticides produced by certain species of the chrysanthemum plant. The flowers of the plant are harvested shortly after blooming and are either dried and powdered or the oils within the flowers are extracted with solvents. The resulting pyrethrin containing dusts and extracts have an active insecticidal components, collectively known as pyrethrins. Semisynthetic derivatives of the chrysanthemumic acids have been developed as insecticides. These are called pyrethroids and tend to be more effective than natural pyrethrins while they are less toxic to mammals. One common synthetic pyrethroid is allethrin. Inhaling high levels of pyrethrum may bring about asthmatic breathing, sneezing, nasal stuffiness, headache, nausea, in coordination, tremors, convulsions, facial flushing and swelling, and burning and itching sensations. The most severe poisonings have been reported in infants, who are not able to efficiently break down pyrethrum.

When a mosquito coil is burned, the insecticides evaporate with the smoke, which prevents the mosquito from entering the room. The remaining components of mosquito coil are organic fillers, binders, dyes, and other additives capable of smoldering well. The combustion of the remaining materials generates large amounts of small particles and gaseous pollutants. These small particles can reach the lower respiratory tract and may be coated with a wide range of organic compounds, some of which are carcinogens or suspected carcinogens. Carcinogens are chemicals which may or has the potential to cause cancer.

Despite the fact that mosquito coil smoke may have many potential adverse health effects, large populations in developing countries such as Guyana still use mosquito coils in their daily lives. To make informative recommendations to consumers as to which types of mosquito coil have lower emissions of

health-damaging pollutants, it is necessary to perform tests of coil emissions in a systemic manner. These are the results that must be provided to the Pesticides and Toxic Chemicals Board so that a decision can be made to protect the health of Guyanese. The following mosquito coils are approved for use in Guyana – **PROTOX, FISH and BAYGON.**

A number of coils are illegal in Guyana and are imported and offered for sale without providing any information to the Board for making an assessment on its health risks and hazards. These coils may pose serious dangers to the health of people who use them. Some of the coils not approved for use in Guyana are **LION BRAND, LIZI and GOLDEER.**