

## Background Information

### Chemicals

**Nicotine** is a powerful mood altering substance (drug) that is extremely addictive. Nicotine is what makes tobacco products addictive.

**Carbon monoxide** is a deadly poisonous gas that replaces the oxygen in red blood cells.

**Carcinogens** are cancer-causing agents. Tobacco smoke is considered to be a 'Group A' carcinogen. (When there is sufficient evidence of cancer-causing agents in a product, the 'Group A' carcinogen category is used.)

**Tar** is a dark sticky combination of hundreds of chemicals including poisons and cancer-causing substances. Tar from the cigarette is very dangerous inside our lungs. It sticks to the cilia in our lungs that are responsible for sweeping out germs and dirt. If the cilia are covered in tar they cannot move efficiently. Germs and dirt then stay in the lungs which can lead to disease. The damage tar does to the body's cilia is only the beginning. The tar and smoke are made up of many harmful chemicals that are known to cause diseases of the body.

#### Some of the chemicals in tobacco products include:

- **Acetone** - a chemical found in nail polish remover;
- **Benzene** - a flammable toxin found in gasoline, solvents and pesticides;
- **Cadmium** - a chemical used to coat batteries;
- **Carbon monoxide** - a chemical found in car exhaust;
- **Arsenic** - a chemical found in rat poison;
- **Ammonia** - a chemical found in toilet bowl cleaner;
- **Phenol** - a chemical found in disinfectants;
- **Formaldehyde** - a chemical used to preserve dead bodies;
- **Tar** - a mixture of chemicals used to build roads;
- **Nicotine** - a poison put into tobacco products to make them addictive.