OP AND CARBAMATES

- Group of chemicals share a common mechanism of cholinesterase inhibition

- **MOA:**
  - Phosphorylation of the acetylcholinesterase (AChE) at nerve endings.
  - Accumulation of acetylcholine at receptor sites.
  - Effector organ become over stimulated
  - Inhibition of AChE (50%) leads to toxic effects; 80 – 90% AChE inhibition will be lethal
CLINICAL FEATURES

- **Inhalation:** Cough, difficulty in breathing, bronchitis, pneumonia.

- **Ingestion:** Nausea, vomiting, diarrhea, sweating, salivation, small or pin point pupils, muscle twitching, fasciculation.
**CLINICAL FEATURES**

- **Skin contact:** Dermatitis

- **Inhalation:** Inhalation can give rise to irritation of eyes, nose, throat and cough.

- **Ingestion:** Nausea, vomiting, diarrhoea, abdominal pain, headache, dizziness, convulsions and coma.
**DDT Story**

- Saved lives through prevention of malaria, DDT kills mosquito’s.
- Banned later as a result of bioaccumulation in the food chain.
- DDT was found in marine sediments, wildlife, and human lipids.
- Caused thinning of eggshells in birds.
GENERAL MANAGEMENT OF PESTICIDES POISONING