DECONTAMINATION

INHALED POISON

• Remove from source of poison
• Give Oxygen
• Inhalation of water aerosol (helps to dilute inhaled irritants)
• Check for hoarseness and singed nasal hairs

CONTAMINATED EYES

• Wash with plain water/normal saline
• Do not use neutralizing solution
• Slowly dribble 50-100ml of saline through I/V tubing
• Careful eye examination
• Check with pH paper

CONTAMINATED SKIN

• Wash with plenty of water and dilute soap solution
• Discard contaminated clothes in a marked plastic bag
• Remove all particulate prior to irrigation
• Immersion of burns in
  - Ammonium salt soln.
  - 10% Calcium gluconate.
  - S/c inj of Calcium deep to burn

GASTRIC DECONTAMINATION

• Dilution
• Emesis
• Demulcents
• Gastric lavage
• Adsorption with activated charcoal
• Catharsis
• Whole Bowel Irrigation
Emesis

Syrup of Ipecac
Dose

• Adults; 30ml (2 tbsp)
• Children; 6-12months, 10ml (2 tsp)
• 1-5 years, 15ml (1 tsp)
• Over 5 years, 30ml
• Second dose
• If patient has not vomited within 30 min

Contraindication

• Children less than 6 months of age
• Nontoxic ingestion
• Comatose patients
• Patients experiencing seizures
• Any patient expected to deteriorate rapidly
• Ingestion of strong alkali or acid
• When vomiting will delay ingestion of antidote
• Compromised gag reflex
• Patient with hemorrhagic diathesis
• Concomitant ingestion of sharp, solid materials
• Evidence of significant vomiting prior to the syrup of ipecac
• Ingestion of petroleum distillate
• Patients with Pulmonary, Cardiac, Neurologic symptoms

Note

Potassium and antimony tartarte, copper sulphate, zinc sulphate, mustard powder, salt solutions are no longer recommended.
Gastric Lavage

**Adults /adolescents:** large –bore orogastric tube, 36-40 French (Ewalds Tube)

**Children:** orogastric tube, 16-28 French

**Procedure**

1. Endotracheal or nasotracheal intubation should precede gastric lavage in the unconscious or seizing patients
2. Airway must be protected
3. Proper length of tube that will be passed is measured and marked before insertion. Once the tube is introduced, confirmation of position of the tube in the stomach is essential
4. The patient should be kept in left lateral decubitus position
5. A saline lavage solution initiated with 200-ml aliquots in an adult, 50-100 ml in children
6. Continue for at least 500ml-1 litre in children and several liters in adults
7. The tube should be used for instillation of activated charcoal and cathartics

**Indications**

(Airway should be secured)

• Semicunsciousness
• Unconscious child or adult
• Loss of gag reflex
• Conscious patient ingesting large quantity of highly toxic substance

**Contraindication**

- Strong alkali or acid
- Convulsants
- Non-toxic ingestion
- Strychnine
- Bleeding diathesis
- Petroleum distillates
- Ingestion of sharp material
- Drug packets
Over dosed Patients

Evaluation of Variables

Is substance toxic? Consider inherent toxicity and dose
Is it too late for decontamination to be effective?
Does the patient have any contraindication to decontamination

Do potential benefits outweigh risk of decontamination?

yes
Dectamination needed
Choose method

No
Decontamination not needed

Syrup of Ipecac
Patient located out of hospital
CNS depressant and substance not amenable to GL or AC

Monitoring and Reevaluation

Is the compound adsorbed by AC?
AC = activated charcoal
GL = gastric lavage
WBI = whole bowel irrigation

YES
Use AC
1st choice in most ingestions needing decontamination

NO
Consider WBI
(Lithium, Lead, other metals, FB, battery)

Gastric Lavage
Patients with potentially serious toxicity consider AC, then GL, then repeat AC

WBI
Drugs that are packets or sustained/delayed release products