Poisonings & Overdose

accidental or deliberate
Poison

– Any substance whose chemical action can damage body structures or impair body functions

Substance Abuse

– The knowing misuse of any substance to produce a desired effect
Routes of Entry

- oral ingestion (PO)
- inhalation
- injection (IV, SC, IM, IO)
- absorption (SL, transcutaneous, PR)
Ingested Poison

- accounts for 80% of all poisonings
- accidental or deliberate
- Activated charcoal – NOT used by EMT’s in LA County
- ABCs and transport
Inhaled Poisons

- Wide range of effects
- YOUR safety is 1st
- Move to fresh air immediately
- Provide airway support and rapid transport
- Bring contained agent or label to hospital
Injected Poisons

- Usually deliberate (drug OD)
- Impossible to remove or dilute
- Can be counteracted (ALS)
- ABC’s, high flow O₂, rapid transport
Absorbed Poisons

- Corrosives will damage the skin
- Some drugs are absorbed SL or PR
- Treat chemical burns
- Do not irrigate Phosphorous or elemental Na
- ABC’s, O₂, rapid transport
Inducing vomiting

- not within the EMT-1 scope of practice to induce vomiting

- But, is the indicated treatment for many poisonings/overdose

THE 3 EXCEPTIONS - next slide please
No Vomiting

- ALOC
- Pts at risk for seizures
- Injected caustics / hydrocarbons
TX –

Ingested caustics/hydrocarbons

- discourage vomiting
- drink water or milk if available
- rapid transport
Anticholinergics

- block the parasympathetic nerves
- “Hot as a hare, blind as a bat, dry as a bone, red as a beet, and mad as a hatter”
- seizure and death within 30 minutes
- Have ALS backup or transport rapidly
Cholinergic Agents

- nerve agents for warfare
- organophosphate insecticide or wild mushrooms
- overstimulate parasympathetic nerves
Signs and Symptoms of Cholinergic Poisoning

- Defecation
- Urination
- Miosis
- Bronchorrhea
- Emesis
- Lacrimation
- Salivation
- GI irritation
- Eye constriction
• SAFETY – avoid exposure
• support ABC’s prn
• suction
• high flow oxygen
• rapid transport
• may be HazMat
Drug Categories

- Narcotics or opiates
- Depressants - barbiturates - downers
- Stimulants - uppers
- Hallucinogens - including PCP
- Designer
- Hydrocarbons
Narcotics or Opiates

- ALOC
- respiratory depression/hypoventilation
- pinpoint pupils
- hypotension
- nausea/vomiting
Depressants (sedative – hypnotic)

- ALOC
- respiratory depression / hypoventilation
- pupils dilated
- loss of coordination
- slurred speech
- bradycardia and hypotension
Stimulants (Sympathomimetics)

- agitation & anxiety
- dilated pupils
- tachycardia
- hypertension
- rapid speech
- seizures
Hallucinogens

- blank stare
- visual hallucinations
- tachycardia, hypertension
- anxiety, agitation
Hallucinogens

- inappropriate behavior
- dilated pupils
- nystagmus
- hot flashes (equals naked patients)
- seizures
Hallucinogen - PCP

- phencyclidine
- “slow motion man”
- fast if violent
- increased strength
- nystagmus
- rebound dilation
Chemically designed for a specific effect

- Ecstasy
- GHB

Overdose:
Respiratory arrest - Hallucinations - ALOC
Hydrocarbons (Abused Inhalants)

- paint residue around mouth & hands
- smell of paint or glue
- coughing
- choking
Aspirin

• Signs and symptoms
  – Nausea/vomiting
  – Hyperventilation
  – Ringing in ears
  – Confusion
  – Seizures

• Transport promptly
Acetaminophen

• common overdose
• not very toxic
• liver failure
• protect self
• ABC’s
• high flow oxygen
• position of comfort
• transport
CO poisoning

- headache
- confusion
- nausea & vomiting
- dyspnea, tachypnea, tachycardia
- unconsciousness
- protect self
- remove patient from source
- ABCs
- high flow oxygen
Food Poisoning

- Salmonella bacterium
- Staphylococcus
- Botulism
Care for Food Poisoning

- History is important
- Transport promptly
- bring some of the suspected food to the hospital
Plant Poisoning

- Several thousand cases each year
  - Assess the patient’s airway and vital signs.
  - Notify poison control center.
  - Take the plant to the emergency department.
  - Provide prompt transport.
the end

Next?