The Anatomy of Drug Testing

Amphetamine
Methamphetamine
Cocaine (C₁₇H₂₁NO₄)
Ecstasy (MDMA)
PCP (Phencyclidine)
THC (Tetrahydrocannabinol)
Caffeine
Nicotine
Alcohol (Ethanol)
Legal Stuffs

• Scheduling
  The purpose

• Schedule I
  No medical use/Highly addictive

• Schedule II
  Some medical application/Highly addictive

• Schedules III / IV
Legal Stuffs (cont.)

- The DOT
  - COC
  - Securing the location

- BAT
  - COC
  - Police vs. Hospitals/Collection sites
Methodologies

- EIA and ELISA
- Spectrophotometry
- Chemiluminescence
- GC/MS (Gas Chromatography/Mass Spectrophotometry)
- Breathalyzer
Sample types

- Hair
- Urine
- Blood
- Stool
  - Meconium
- Breath
- Body tissues/fluids
Commonly Tested Drugs (legal)

- Amphetamines
- TCAs (anti-depressants)
- Oxycodone
- Barbituates
- Benzodiazepines
- Salicylate
- Acetaminophene
Commonly Tested Drugs (illicit)

- Cocaine
- Methamphetamines
  - MDMA (ecstasy)
- Opiates
- PCP
- THC
Uncommonly Tested Drugs

- LSD
- Psyllicibin (Mushrooms)
- DMT
- Mescaline
- Peyote
- Nitrous Oxide
Putting it all together!

- Amphetamine
- Methamphetamine
- Cocaine ($C_{17}H_{21}NO_4$)
- Ecstasy (MDMA)
- PCP (Phencyclidine)
- THC (Tetrahydrocannabinol)
- Caffeine
- Nicotine
- Alcohol (Ethanol)