Magic Mushrooms
Aka Shrooms, Mushies, Boomers
Psychedelics

• Drug category

• Types
  – Lysergamides (eg. LSD aka acid)
  – Indolealkylamine (eg. Shrooms)
  – Phenylethylamine (eg. Molly)

• Primary Receptor
  – 5-HTa: serotonin-like
    • Mood, Hallucinations
Mushrooms

- Indolealkylamine (eg. DMT)
- Contain psilocybin and psilocin
  - primary hallucinogenic component
  - Isolated by Albert Hoffman in 1958
- Used in ancient times for spiritual rituals
- **Schedule 1** (most illegal) since 1970
- Potency varies between:
  - Species
  - Same Crop
  - **Same mushroom** (eg. Cap v Stem)
Pharmacokinetics

• Predominantly ingested
  – Fresh mushroom, dried, powdered, encapsulated
  – **Slower onset** compared to smoking, injecting
    • 10-40 min onset
  – **Longer lasting** compared to smoking, injecting
    • Lasts 3-8 hours
Acute Effects

- Elevated sense (auditory, visual, emotions)
- **Hallucinations**
- Altered time perception, disorientation
- Euphoria at lower doses
- Anxiety at higher doses
- Limited dopamine release
Mode of Action

- Psilosin binds to the **5-HT2a receptor**
  - Agonist: causes an increase in action
- **Cross tolerance** with LSD
- Also 5-HT1A, 5-HT1D, 5-HT2C
Withdrawal

- Hallucination Persisting Perception Disorder (HPPD)
- No significant long-term health effects
- Insignificant withdrawal relatively
- Flashbacks
Treatment

• Acute (right away, for overdose)
  – No immediate way to undo “bad trip”
  – Benzodiazepines can be used for agitation

• Chronic (long term)
  – Considered not addictive