



# LEGAL AND ILLEGAL DRUGS

Chapter 17



# Myth of Fact?

**Myth:** Medicines from drug stores can't harm you.

**Fact:** Medicines can be just as dangerous as “street drugs” if they are used inappropriately.

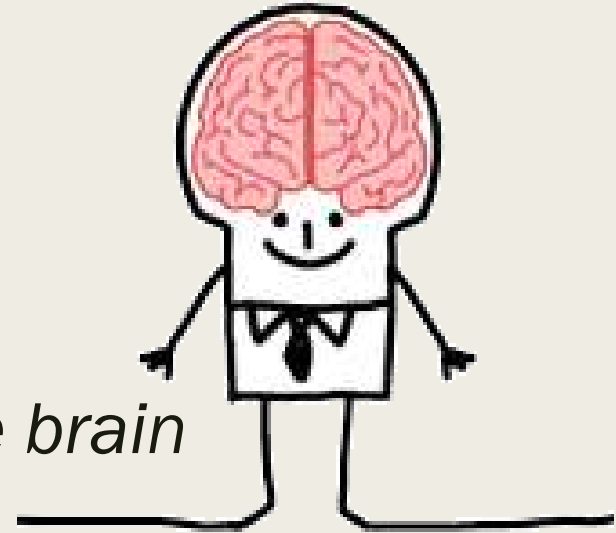
# Medicines

- Legal drugs that help the body fight injury, illness or disease
  - *Over the counter*
  - *Prescription*
- Drug misuse- the improper use of medicines
- Drug abuse- when a drug is intentionally use improperly or unsafely



# The “Reward Pathway”

- Psychoactive drug- mood altering drug
  - *Trigger activity along a pathway of cells in the brain (reward pathway)*
- Dopamine is released
  - *Cause the user to ignore the harmful effects of the drug*
  - *Intense cravings for the drug when it is not available*
  - *Dull the brain’s reactions to natural levels of dopamine therefor the user no longer feels pleasure from normal activities*



# THE PATH TO ADDICTION

## Drug Addiction



Drug use activates the brain reward system (pleasure system).

The drug user needs more of the drug to produce the same effect.

The drug user experiences uncomfortable withdrawal symptoms if he or she tries to stop using the drug.

The drug user is both physically and psychologically dependent on the drug.

# Addiction

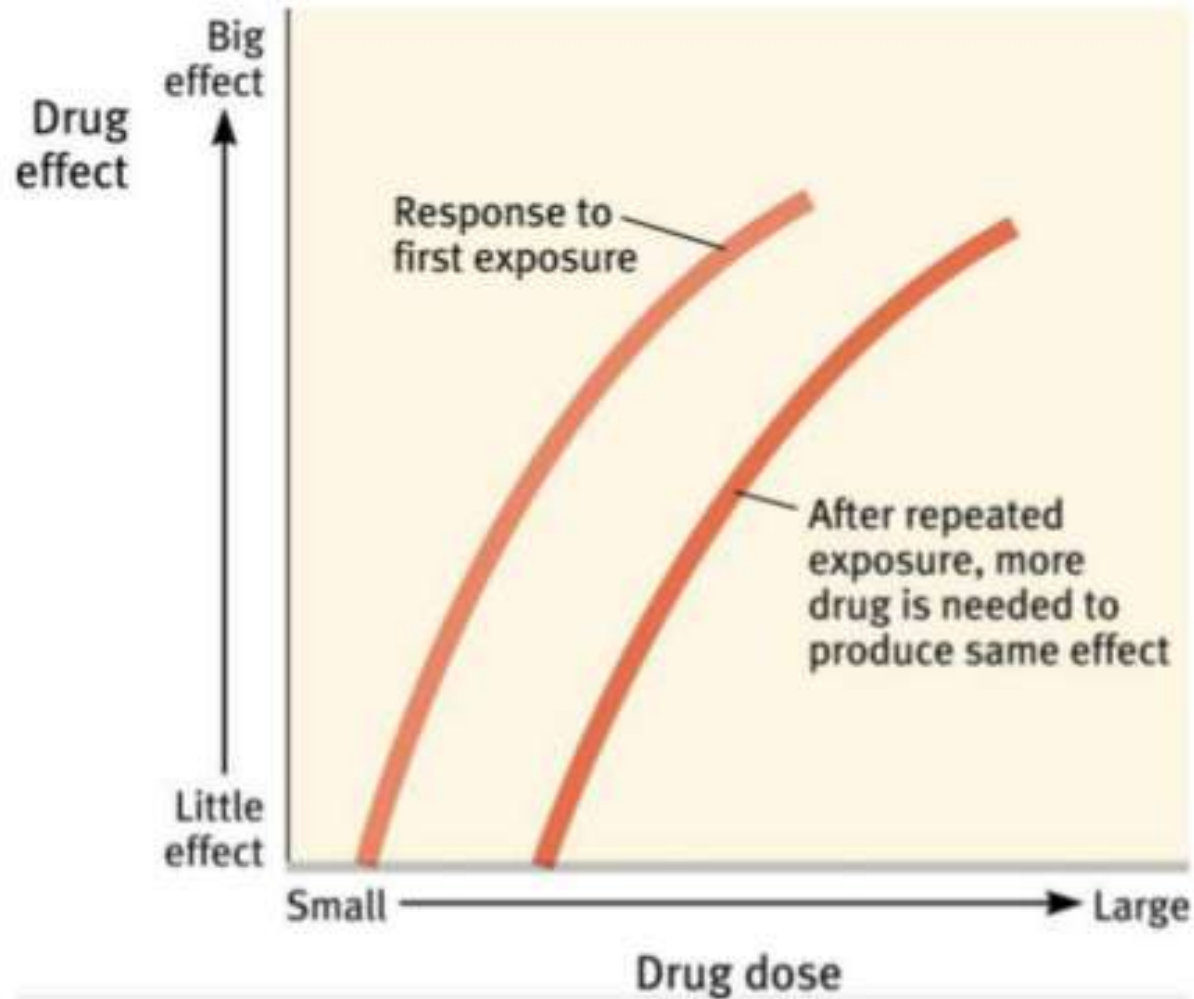
- A compulsive use of a drug, despite any cost to health, family, or social standing
- A disease that changes the structure and chemistry of the brain



# Tolerance

- When a person uses a drug repeatedly, the body may develop tolerance
- The user needs increasingly larger amounts of the drug to achieve the original effect
- Lead to drug dependency
  - *Chemical need for the drug and can't function normally without it*

# Tolerance



**Tolerance** of a drug refers to the diminished psychoactive effects after repeated use.

Tolerance feeds addiction because users take increasing amounts of a drug to get the desired effect.



# Withdrawal

- When a person who is dependent on a drug and stops taking the drug they will experience withdrawal symptoms
  - *Nausea or vomiting*
  - *Headaches and dizziness*
  - *Fever*
  - *Digestion problems*
  - *Paranoia or panic*
  - *Tremors, seizures, or death*



# Drug interactions

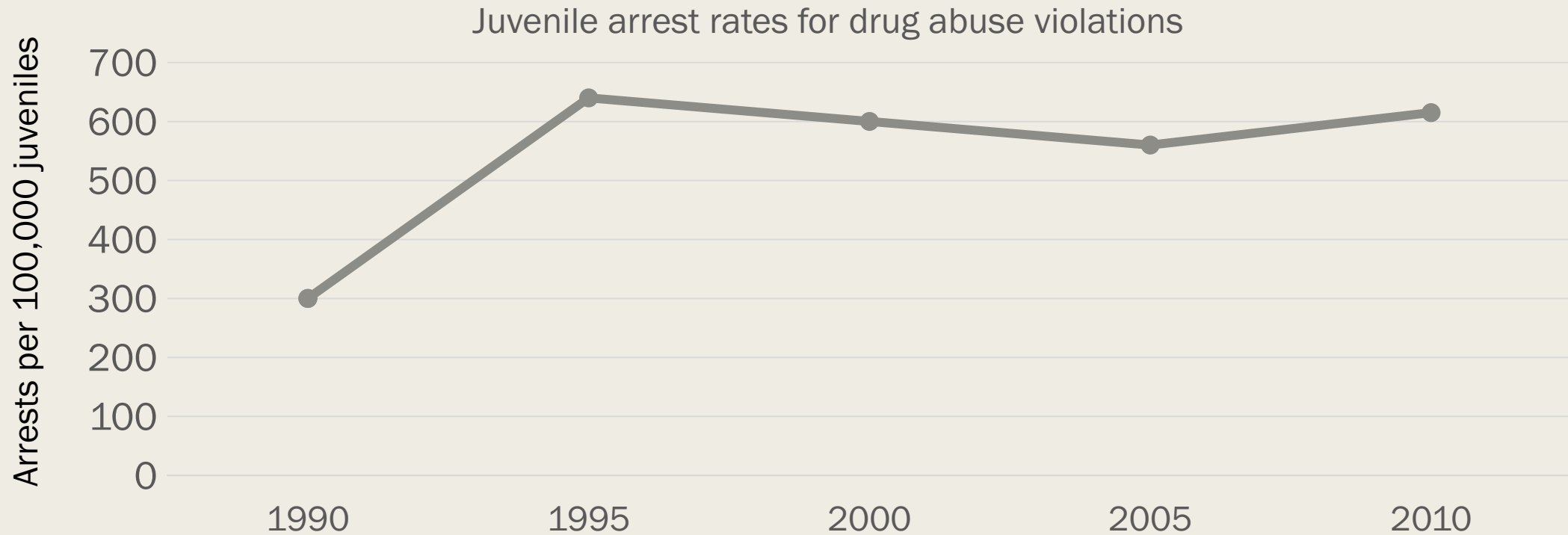
- Drug antagonism- occurs when each drug's effect is canceled out or reduced by the other
  - *Ex. Smoking while taking blood pressure medication*
    - Nicotine causes high BP therefore cancels out the BP medication
- Drug synergism- occurs when drugs interact to produce an effect greater than those that each drug would produce alone
  - *Ex. Drinking alcohol with sleep medication*
    - May cause rapid loss of consciousness



# Risks

- Hepatitis and HIV
- Risks to fetus and newborn
- Overdose
- Dependency
- Relationships
- Education, job, career
- society
- Legal





1. How many drug arrests were made in 1990?
2. Did more juveniles arrest increase or decrease from 2005-2010?
3. What can we say about juvenile arrest rates from looking at this graph?

# Illegal Drugs

- A chemical substance that people of any age may not lawfully manufacture, possess, buy, or sell
  - *Stimulant*
    - Speeds up body's functions
  - *Depressant*
    - Slows down body's functions
  - *Inhalant*
    - Breathed through the lungs, cuts off O<sub>2</sub> to the brain
  - *Designer*
    - Chemically similar to illegal drug
  - *Narcotic*
    - Pain reliever
  - *Hallucinogen*
    - Makes you see/hear things that aren't there

# Activity

Building health skills

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