

# This is Their Brain on Drugs

Danielle C. Nerko, Ph.D.

Westchester Community College

Pulse Check 2019



Westchester  
Community College

State University of New York

# Rise of Street Chemistry

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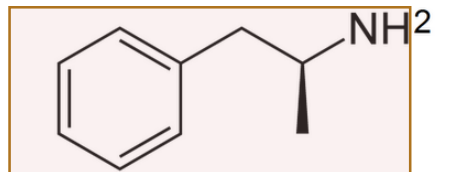
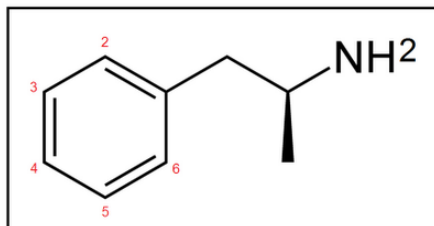
- **Drugs are only illegal once the government declares them illegal.**
- **The government doesn't declare a drug illegal until it becomes a concern.**
- **Changing the chemical formula of a molecule by 1 atom(!) gives you a new substance, not subject to existing laws.**

# The Internet

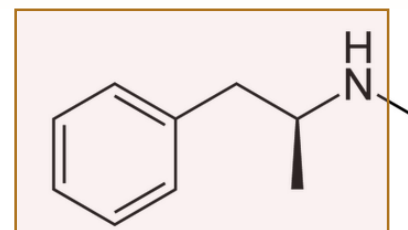
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- **Knowledge on drug modification used to be limited to chemistry texts and articles.**
- **Now, someone can modify a drug and share their recipe with an unlimited number of people.**
- **The street chemists are ahead of legislation – always!**

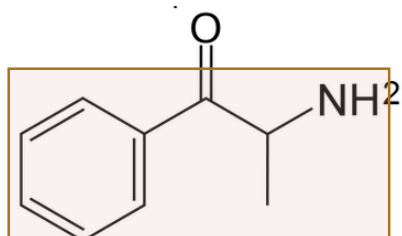
# Stimulants



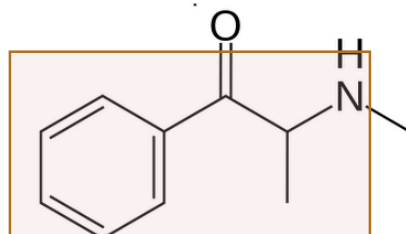
amphetamine



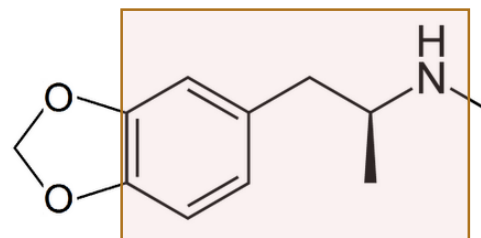
methamphetamine



cathinone

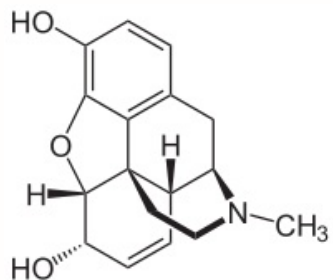


methcathinone

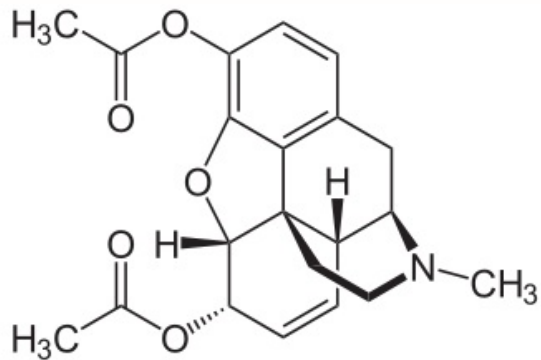


methylenedioxy-methamphetamine

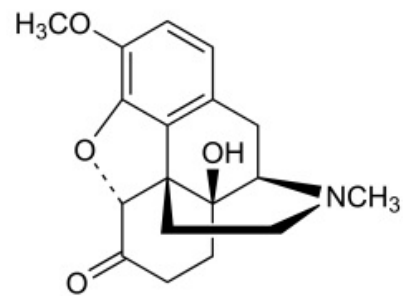
# Opioids



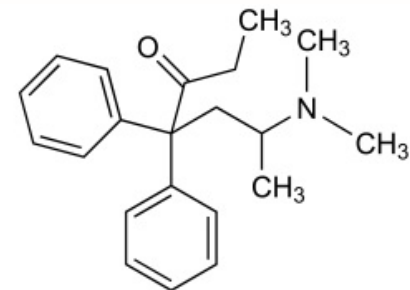
**Morphine**



**Heroin**



**Oxycodone**



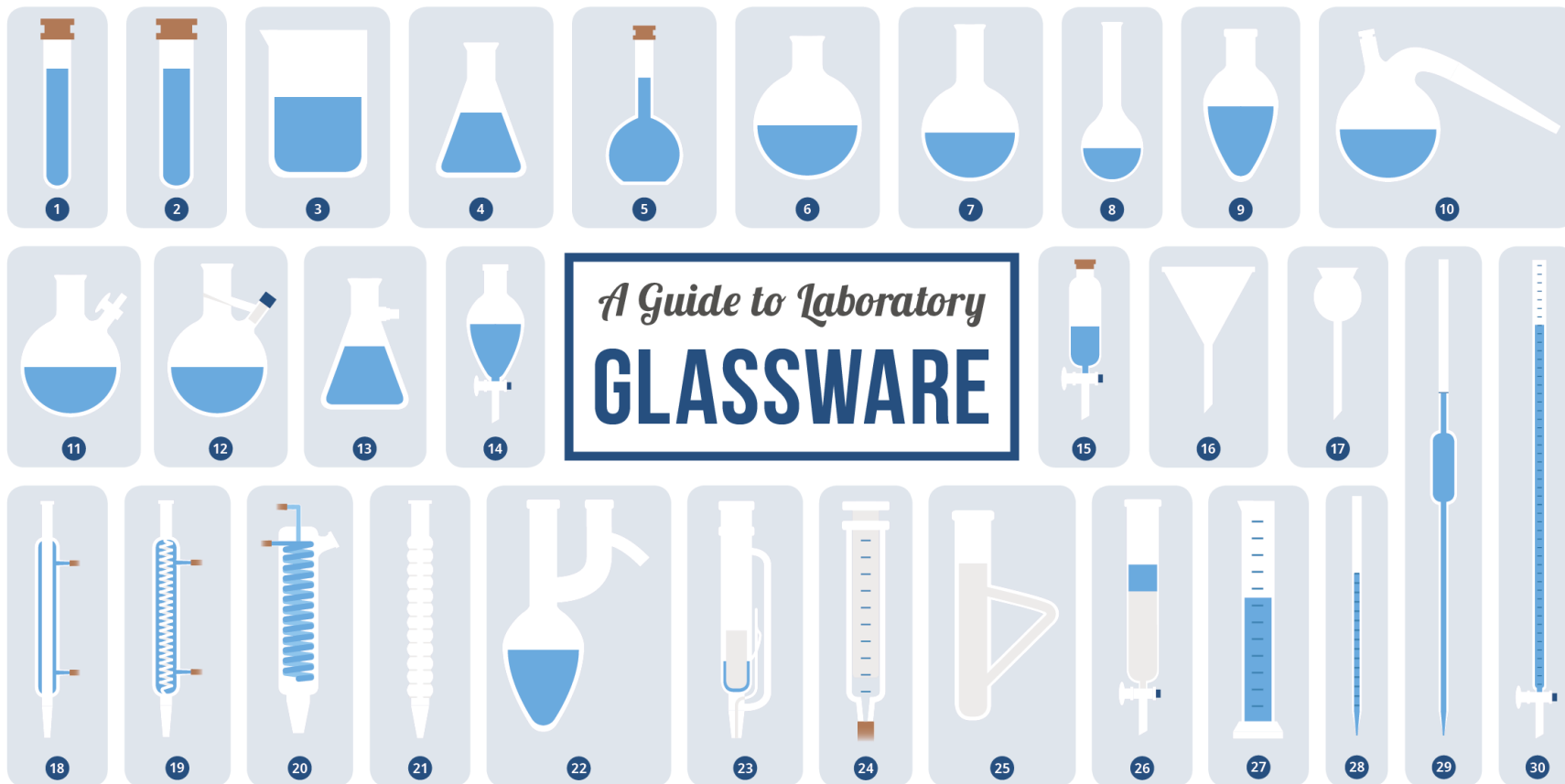
**Methadone**











*A Guide to Laboratory*  
**GLASSWARE**

- |                            |                        |                      |                         |                      |                          |
|----------------------------|------------------------|----------------------|-------------------------|----------------------|--------------------------|
| 1 Test tube                | 6 Round-bottomed flask | 11 Schlenk flask     | 16 Filter funnel        | 21 Distilling column | 26 Chromatography column |
| 2 Boiling Tube             | 7 Florence flask       | 12 Straus flask      | 17 Thistle funnel       | 22 Claisen flask     | 27 Graduated cylinder    |
| 3 Beaker                   | 8 Kjeldahl Flask       | 13 Buchner Flask     | 18 Liebig condenser     | 23 Soxhlet extractor | 28 Graduated pipette     |
| 4 Conical/Erlenmeyer flask | 9 Pear-shaped flask    | 14 Separating funnel | 19 Graham condenser     | 24 Gas syringe       | 29 Volumetric pipette    |
| 5 Volumetric flask         | 10 Retort flask        | 15 Dropping funnel   | 20 Friedrichs condenser | 25 Thiele tube       | 30 Burette               |

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# Indoor Signs of a Drug Lab

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- **Laboratory Glassware or improvised glassware**
- **Containers connected by hoses or tubing**
- **Scales**
- **Packaging equipment**
- **Hot plates outside of food preparation areas**

- # Outdoor Signs of a Drug Lab

- Patches of dead vegetation
- Unusual occupancy habits (nocturnal activity versus dormant daytime)

# CDC Recommendations for PPE

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- **PPE is Personal Protective Equipment**
  - Respiratory Protection
  - Gloves
  - Gowns
  - Eye Protection

# Fentanyl Precautions

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- Powdered fentanyl is serious – and given enough time can absorb through your skin
- Some stories are exaggerated – standard gloves and face masks provide adequate protection against powder
- Make every effort to minimize time of exposure
- Ensure that fentanyl powder is not on clothes or shoes to prevent unprotected exposure

# More Serious Risks

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- Solids pose relatively low risk to skin and clothing – mucus membranes are the most vulnerable here
- Liquids and gases are more serious risks
  - These substances can be corrosive
  - Can soak through clothing
  - Particles small enough to pass through standard facemasks
  - Not always blocked by standard gloves
- If you come upon a scene contaminated with unknown liquid chemicals or that has corroded gas cylinders – wait for the scene to clear. Your equipment may not protect you!



# Addiction Counseling Program

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**Westchester Community College has one of the few local programs to become a certified Addiction Counselor**

- **One-year certificate program**
- **Two-year Associates in Applied Science Program**



# Thank you!

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**Danielle C. Nerko, Ph.D**

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**[Danielle.Nerko@sunywcc.edu](mailto:Danielle.Nerko@sunywcc.edu)**