

FENTANYL

John M. DiMuro, DO, MBA
Board Certified Anesthesiology, Pain Medicine
Fellowship Trained – Pain Medicine
Nevada Chief Medical Officer
Nevada Division of Public and Behavioral Health







- *Fentanyl is classified as a **Schedule II** opiate analgesic
- *It is the most potent opiate used in clinical practice in the USA
- *Commonly used as an analgesic sedative for medical procedure sedation
- *Rapid onset and metabolism allows for shorter duration of recovery after administration



D.E.A. DRUG SCHEDULES



Schedule I

No currently accepted medical use and high potential for abuse

Schedule II

 High potential for abuse with use potentially leading to severe psychological or physical dependence

Schedule III

Moderate to low potential for physical and psychological dependence

Schedule IV

Low potential for abuse and low risk of dependence

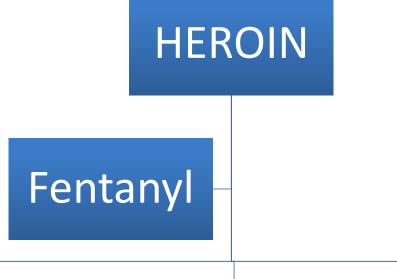
Schedule V

Lower potential for abuse than Schedule IV drugs



RELATIVE OPIATE POTENCIES





Morphine

Demerol

Dilaudid







Fentanyl is mass produced as:

- *powder
- *liquid
- *transdermal gel patch
- *'lollipop'
- *mucosal patch
- *nasal spray













WHY IS FENTANYL UNIQUE?



- *100x more potent than morphine
- *20-50x more potent than heroin
- *Good cardiovascular stability
- *Rapid onset analgesia and sedation
- *Well-tolerated with little documented true allergy
- *Inexpensive







- *Intravenous anesthetic
- *Cancer pain
- *Skin patch pain reliever
- *Oral/Nasal preparation for more rapid onset
- *Sedative for medical procedures
- *Illicit drug use



OPIATE SIDE EFFECTS



- *Decreased respirations
- *Sedation
- *Urinary retention
- *Nausea
- *Dry mouth
- *Constipation
- *Decreased blood pressure and heart rate
- *Drug-drug synergy
- *Addiction / Rapid tolerance



THE FENTANYL 'PROBLEM'



- *Overuse of prescribed Fentanyl by patients
- *Use of prescribed Fentanyl diverted by patients
- *Illegal manufacturing and distribution of fentanyl
- *Illicit drug use
 - -sole drug of abuse
 - -added to other drugs such as heroin or marijuana to increase potency
- *Abuse by healthcare providers
- *Prescription-writing abuse by physicians
- *Poorly understood pharmacodynamics by non-anesthesiologists



CORRECTIVE ACTIONS



- 1) Cap prescriptions to a maximum of 365 days/year
- 2) Point-of-service urinary drug screens
- 3) Encourage continuing medical education courses by medical boards for opiate prescribing
- 4) Make the Prescription Drug Monitoring Program ("PDMP") more thorough
 - a) Allow access by first responders
 - b) Enter results of urine drug testing into the PDMP
 - c) Enter results of any previous hospitalizations for overdose
- 5) Review the PDMP data for highest volume opiate prescribers
- 6) Provide greater access to recovery programs and Vivitrol
- 7) Verify that there is no redundancy in a prescribed opiate regiment
 - a) No reason for a patient to be on more than one long-acting and one short-acting opiate simultaneously



Fentanyl



Questions?