



U. S. Drug Enforcement Administration

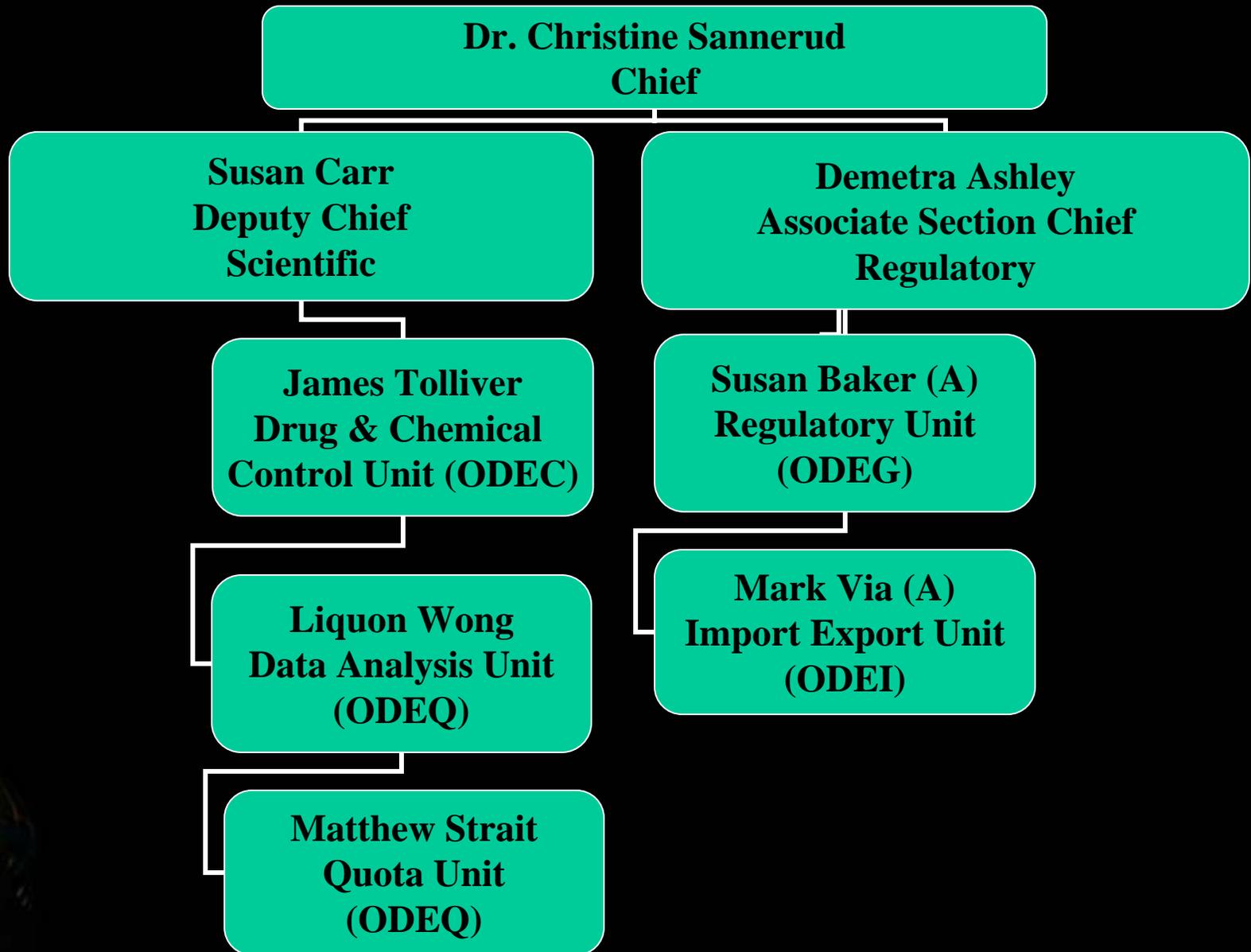
"A Tradition of Excellence"

*Drug Enforcement Administration
Office of Diversion Control*

*15th National Conference on
Pharmaceutical & Chemical Diversion*

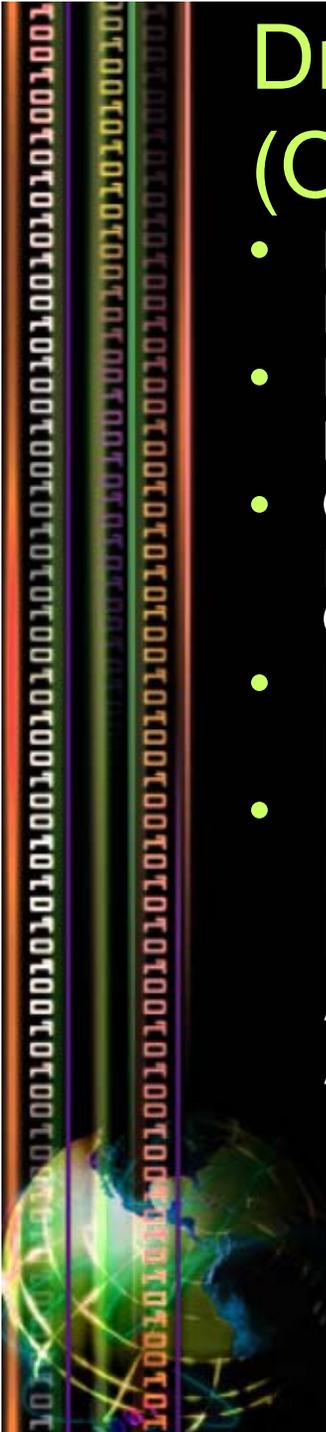
*Houston, Texas
June 6-8, 2006*

Drug & Chemical Evaluation Section



Drug & Chemical Evaluation Section (ODE)

- Drug & Chemical Control Unit (ODEC)
Domestic & International Drug Control
- Data Collection & Analysis Unit (ODED)
Monitor Trends in Drug Diversion & Abuse
- Quota and UN Reporting Unit (ODEQ)
Establish and Revise Aggregate, Manufacturing, & Procurement Quota
- Import/Export Unit (ODEI)
Import/Export Permits & Declarations
- Regulatory Unit (ODEG)
Provide Guidance to Field
Employee Waivers
Approve Registration of Schedule I & II Bulk Manufacturers
Approve Registration of Schedule I & II Importers



What is Fentanyl?

- Fentanyl is a Schedule II narcotic analgesic
 - It was first synthesized in Belgium in the late 1950s
 - It is about 80 times more potent than morphine
 - Dosage units are in micrograms rather than milligrams
 - Pharmaceutical Products:
 - Duragesic – transdermal patch
 - Actiq - lollipop
 - Sublimaze – liquid injectable typically used for outpatient surgery



Fentanyl Abuse: On the Rise?

- Outside the hospital setting, most illicit use of fentanyl has been from diverted pharmaceutical products (Duragesic, Actiq), which are used for pain management.



Why the Rise in Fentanyl?

- Previously, fentanyl could only be made by expert chemists
- Now there is access to relatively new and easier synthetic method which can be obtained via the Internet
- Inexpensive to manufacture with very high profit margin



Clandestine Fentanyl

- DEA had reported only 5 fentanyl labs in the United States since 2000
- At least 12 different fentanyl analogues were produced clandestinely in the 1980's
- It is inexpensive to make
 - \$173 worth of chemicals yields 24.2 grams of fentanyl
 - Assuming DEA's dsu of 0.16 milligrams, this amount corresponds to 151,250 dsu



On Internet: From France by Siegfried

- Preparation of synthetic white Heroin for street use
- “The pure Fentanyl can not be used as is, because it's much, much too strong and MUST be diluted, else there will be a lot of overdoses!
- The following procedure gives a white heroin which is the same as very good (30%) street heroin.”
- “This type of Heroin was used and sold during a year, and the feedback of the consumers was very good. The consumers were very happy and didn't want the usual brown Heroin anymore. So be careful, some people (The Mafia and other dealers) will perhaps turn very jealous! Remember that with 1gr of pure Fentanyl HCl you can make 100gr of very high quality Heroin! DON'T USE and DON'T SELL pure Fentanyl HCl, this is a very toxic material which can cause many overdoses if not diluted!”

Fentanyl / MDA Lab

- Response to a lab that was suspected to be MDMA.
- DEA chemists analyzed the samples submitted and confirmed fentanyl and MDA present.
- A 5 kilogram bag of “NPP” (1-phenethyl-4 piperidone) precursor was seized, which could make approximately 5 kilograms of pure fentanyl.



Fentanyl / MDA Lab

- Tablet press seized and thousands of finished tablets were found, including over 9,000 tablets which were made to look like “Oxycontin” tablets.
- Instead, they contained a large dose of fentanyl (1.5 mg)
- Such tablets have been spotted around the country, and it is speculated that this lab was the source.





The larger tablets are licit "Oxycontin" 80 mg tablets. Note the film coating on the outside (green) and the white inside. The smaller tablets are from the seized lab, and are green throughout.

Seizure of Fentanyl

- Early 2006 - package of methamphetamine and suspected cocaine seized
- DEA Lab was told the package of suspected cocaine field tested positive for cocaine.
- Package actually was essentially pure fentanyl with a net weight of near 1 kilogram.



Seizure of Fentanyl

- NOT hard pressed brick like cocaine. It was white powdery substance.
- Possibly tested positive for cocaine using Scotts Test by mistakenly breaking the other ampules.
- DEA Lab examined the common color tests and used them on fentanyl.....



Color Tests for Fentanyl



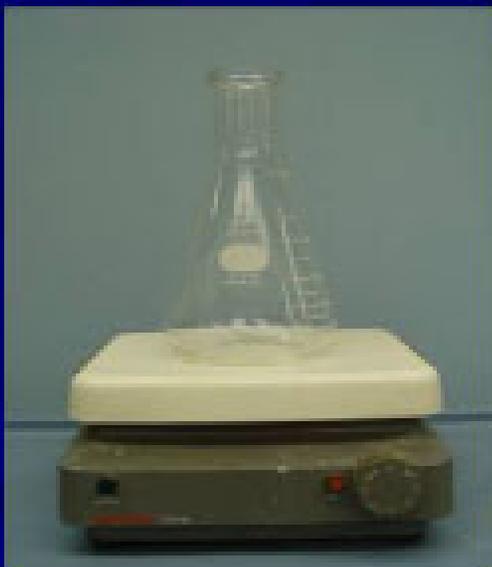
Scott's Test
For Cocaine



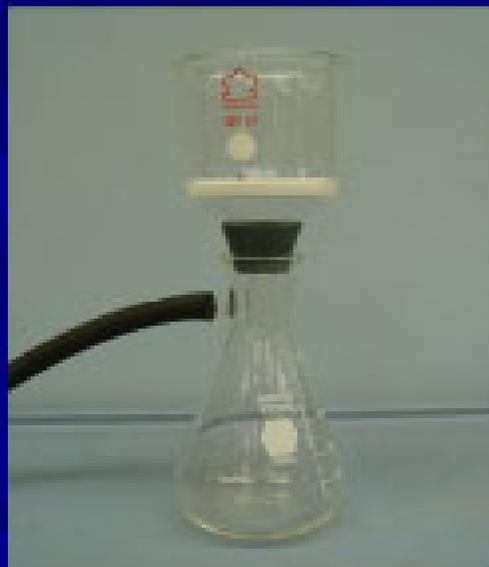
Marquis Test



Meth Test
(Sodium Nitroprusside)



MIX & STIR



FILTER



ISOLATE

- Simple and cheap glassware and equipment
- Some Chemicals Involved: phenethyl bromide, 4-piperidone, 1-phenethyl-4-piperidone (NPP), aniline, propionyl chloride
- No heat required / just stir for 24 hours

Fentanyl Safety & Hazards

- Fentanyl can be lethal at very low levels.
- An exposure of 0.250 milligram can potentially be lethal in non-tolerant person
- From 0.012mg/hour to 0.100 mg/hour are used in the transdermal patch for chronic pain
- 5 mg of fentanyl will knock out a person for surgery.
- It is speculated that fentanyl, or a fentanyl derivative, was used by the Russian Army to end a terrorist siege in a theater, and over 100 civilians died in the process.
- Avoid inhalation of powder at all costs. Taking samples or opening a package could stir up powder. Use gloves and dust mask or APR when handling sample or SCBA for suspected lab.

Fentanyl Safety and Hazards

- Symptoms of ingestion include: coughing, dizziness, sedation, respiratory arrest, coma, or death.
- If inhaled, move to fresh air.
- If ingested, induce vomiting.
- If you know you will be working with fentanyl, notify emergency responders, and make sure they have Narcan (naloxone) on hand. This is an antidote for opiate overdose.
- Call DEA Lab if you have any questions.

Current Overdoses and Deaths

City	Overdoses	Deaths
**Approximate numbers		
➤ Chicago, Illinois		
➤ February Outbreak	34	10
➤ April Outbreak	144	11
➤ Camden, New Jersey		
➤ April Outbreak	75	6
➤ Harrisburg, Penn.		
➤ April Outbreak	20	4
➤ Wilmington, Del.		
➤ April Outbreak	100	5
➤ Philadelphia, Penn		
➤ April Outbreak	70	15
➤ Salisbury, MD		
➤ April Outbreak	8	1
➤ Detroit, MI		
(From September 2005 to May 31, 2006)	unk	148
		(20 deaths between 5/20/06 and 5/31/06)
TOTALS:	451	200



Clandestine Lab



OPERATIONS DIVISION
DIVERSION



CONTROL

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