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Drug and Chemical Evaluation Section (ODE) Chemical Role includes:

- Determination of chemicals used in the manufacture of controlled substances.
- Use of existing regulatory mechanisms to control compounds used in this manufacture.

Current Chemical Control Activities

- Chemical Mixtures Final Rule
- Iodine
- Sodium Permanganate

Chemical Mixture Rulemaking

- Implements regulations that define those chemical mixtures that qualify for automatic exemption for 27 of 34 listed chemicals addressed in NPRM published September 16, 1998 (63 FR 49506)
- Under separate rulemaking DEA finalized regulations on six pseudo/ephedrine alkaloids (68 FR 23195) published May 1, 2003.

Chemical Mixtures

- Three Tiered Approach to Exemptions
 - Concentration Limits
 - Exemption Categories
 - Exemption by application process
 - This process finalized in Federal register Notice (68 FR 23195) published May 1, 2003.

Status: Pending review by DOJ

Chemical Mixtures Final Notice

- Does not address iodine
- Iodine will be addressed under separate rulemaking
- Changing diversion situation and potential threat to public health

Iodine Control

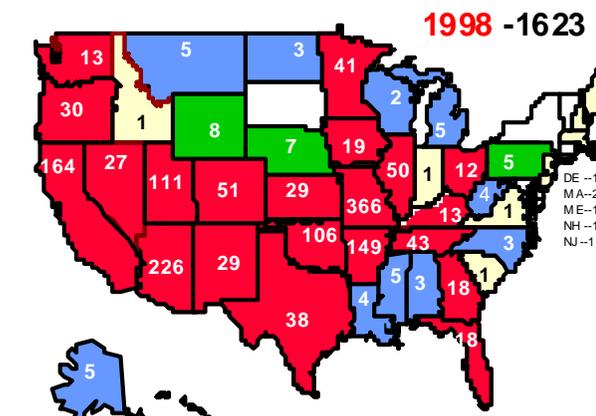
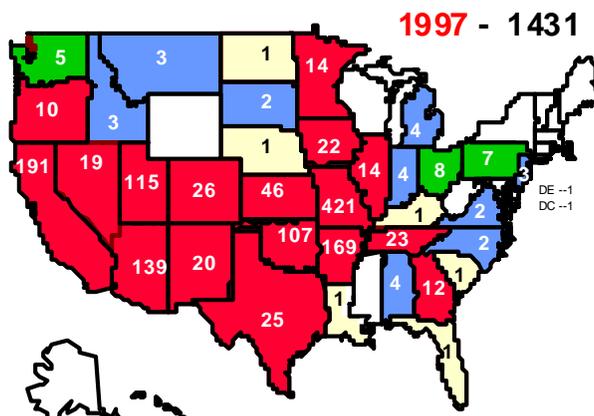
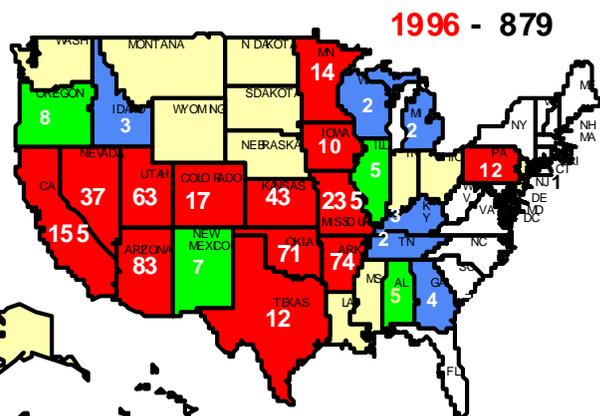
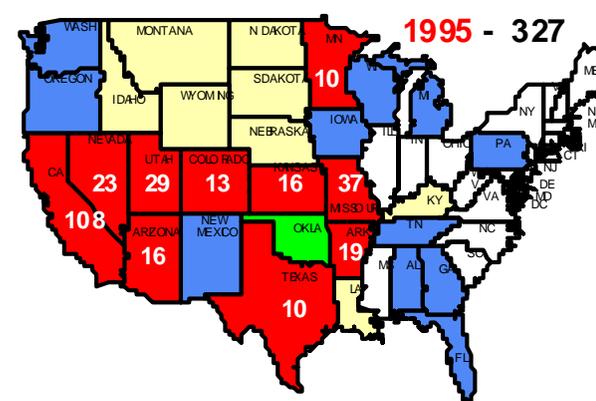
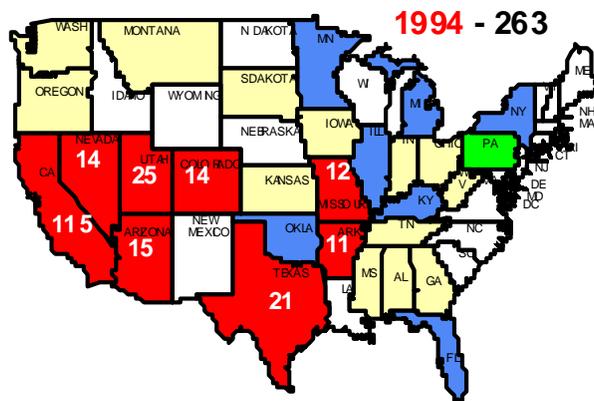
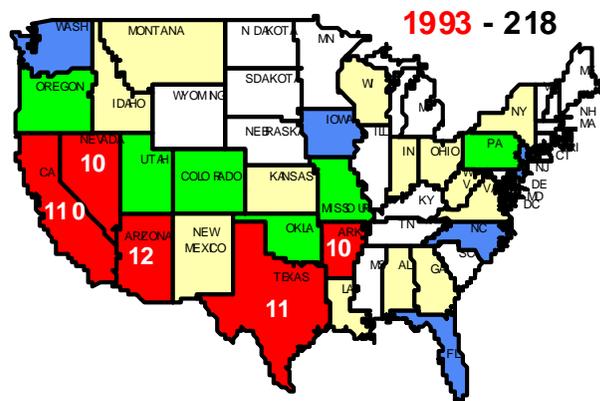
Iodine

- Iodine used as reagent in Methamphetamine production
- Number one U.S. clandestinely produced drug

Methamphetamine

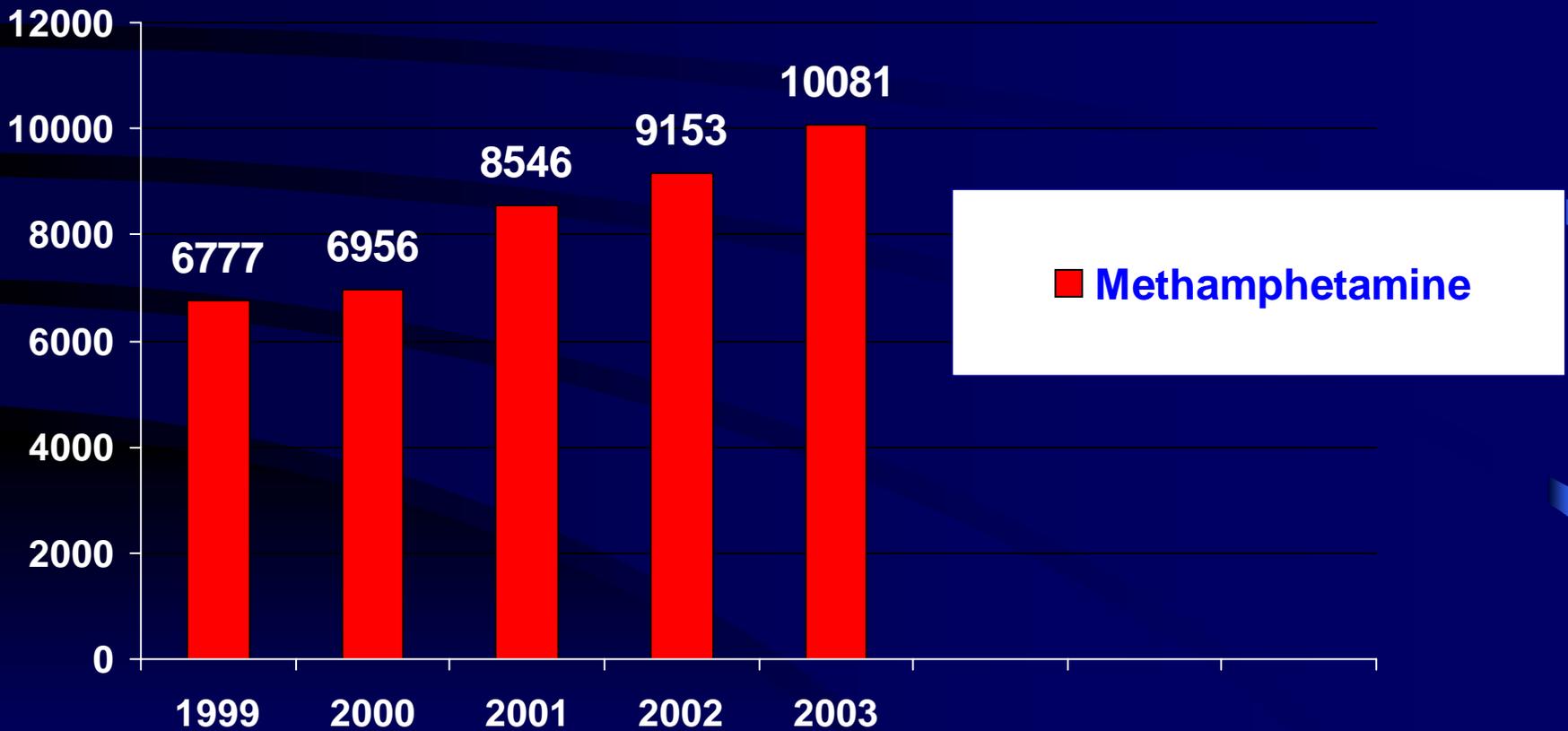
Clandestine Laboratory Seizures

DEA Participation





DEA and State and Local Law Enforcement Clandestine Laboratory Seizures Calendar Years 1999 - 2001



Methamphetamine Production

- P2P + Methylamine \longrightarrow d,l-methamphetamine
- Ephedrine + Hydriodic Acid + Red-P \longrightarrow d-methamphetamine

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Methamphetamine Production

- Ephedrine + Hydriodic Acid + Red-P \longrightarrow d-methamphetamine

-

- Pseudoephedrine + Iodine + Red-P \longrightarrow d-methamphetamine

- or Ephedrine Crystals

-





22 5:97

“Mexican Crime Group Methamphetamine ‘SUPER LAB’ Seizure in California.”



“Two Large Capacity Methamphetamine Clan Labs.”



Existing Iodine Controls

- List II Chemical
- Threshold 0.4 kilograms
- Only domestic transactions regulated
- Import/Export transactions exempted
- Iodine tinctures (considered chemical mixtures) are exempt

Iodine Problem

- Widely used in clandestine laboratories
- Since tinctures are exempt, lab operators have discovered they can acquire unregulated 7% tincture, add hydrogen peroxide and precipitate out iodine crystals for clan lab use
- CY 2003 EPIC reports 2,237 clandestine laboratories using iodine crystals and additional 1,809 laboratories using iodine tincture
- Scope of diversion is an international problem

Proposed Changes to Iodine Regulations

- Move from List II to List I
 - Impose registration requirement
- Add Import/Export Controls
- Remove threshold so that all transactions regulated regardless of size
- Control chemical mixtures at concentration level which will regulate 7% iodine tincture
 - Used primarily in livestock/horse industry
 - No household use

Iodine Control

- Will not adversely impact any of the iodine products sold in retail drug store setting
- Will exempt iodine-povidone complexes (all concentrations)
- Will not regulate iodine 2% tincture
- Will not control any of the iodide compounds sold via prescription or radiolabeled for diagnostic purposes.

Sodium Permanganate

Cocaine Production



Cocaine is extracted from the coca leaf after the leaves are picked and dried.





TYPES OF CHEMICALS HISTORICALLY USED IN THE PRODUCTION OF COCAINE

SOLVENTS - Methyl Ethyl Ketone (MEK), Methyl isobutyl Ketone (MIBK), Acetone, Ethyl ether, Toluene, Kerosene

ACIDS - Sulfuric Acid
Hydrochloric Acid

BASES - Calcium, Sodium or Potassium Carbonate,
Calcium Oxide
Ammonia Water

OXIDANTS - Potassium Permanganate

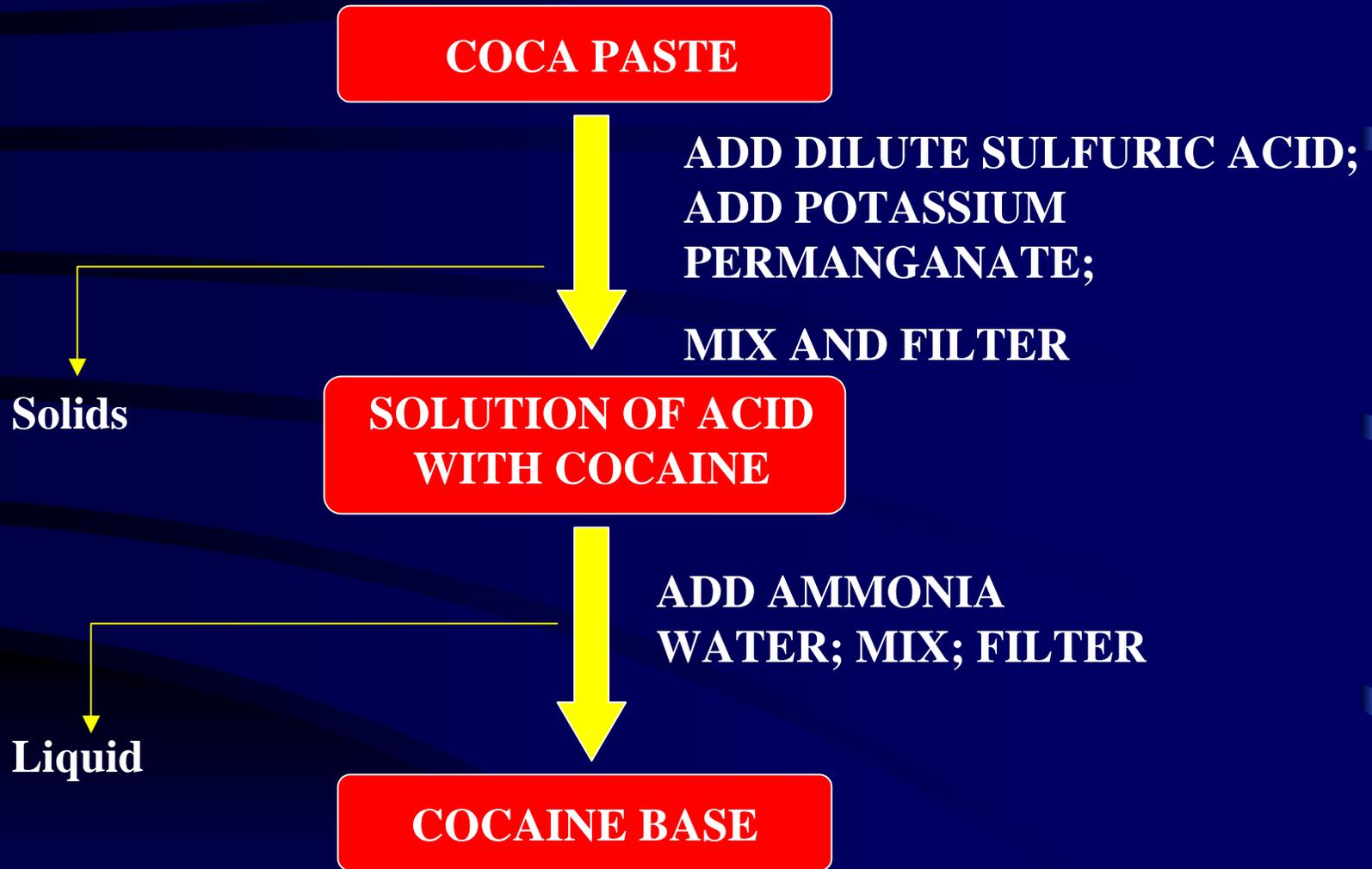




PRODUCTION OF ILLICIT COCAINE FOUR STEPS



Production of Coca Base





Sodium Permanganate

- Direct Substitute for Potassium Permanganate
- Potassium permanganate one of the most important chemicals for cocaine production
- U.S. producers changing production toward increase production of Sodium Permanganate
- Sodium Permanganate has advantage of 40% solubility in water

Proposed Controls for Sodium Permanganate

- Since directly substitutable for Potassium Permanganate
- Propose Same level of Control
- List II – No Registration
- Thresholds: 55 kgs domestic, 500 kgs import/export
- Chemical Mixtures \leq 15 percent exempt

Status

- Sodium Permanganate Notice of Proposed Rulemaking being circulated for signature within DEA
- Pending review by DOJ

Other Issues

- Reviewing ergocristine (legitimate/illicit use)
 - Precursor to LSD
 - Currently regulate ergonovine and ergotamine
 - Recent large case use ergocristine
- Possible international control of gamma butyrolactone (GBL)
 - Precursor to gamma hydroxybutyrate (GHB)
 - Topic raised by International Narcotics Control Board (INCB)

Gamma Hydroxybutyrate (GHB) Synthesis

- ♦ Extremely simple one step synthesis
- ♦ Primary Precursor = Gamma Butyrolactone (GBL)
- ♦ GBL + Sodium Hydroxide
(or Potassium Hydroxide) + Water
- ♦ Historically sold as GHB Kits on Internet
(prior to control of GHB as C-I)

- Each Kit Includes :
- One Bottle of GBL
- One Bottle NaOH

Manufacturing Procedure:

Combine Pre-measured Bottles

Fill to line with Water =

Sodium Salt Gamma Hydroxybutyric Acid

Office of Diversion Control

GHBKIT.com

Exothermic Kits
Simple Mixing Instructions!

Our kits contain the highest quality ingredients available

The Kit of Choice!

90 gram Sodium Kit

1 Kit	\$ 59.99
2 Kits	\$99.99
ONLINE 4 Kits	\$ 149.99

100 gram Sodium Kit

1 Kit	\$ 100.00
2 Kits	\$ 180.00

100 gram Sodium Kit

1 Kit	\$ 120.00
2 Kits	\$ 210.00

Butyrolactone

282g	\$ 45.00
564g	\$ 75.00
844g	\$100.00
3000g	\$250.00
6000g	\$400.00

Each Kit Includes: 1 bottle of GBL & NaOH, pH Strip and safety gloves.

Order: [Mixing Instructions](#) ; [Disclaimer](#)

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We accept

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