



NMS Labs

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Toxicology Report

Report issued 05/06/2009 12:02

Patient Name NAVARRO, LUIS
Patient ID 09-0291
Chain 10994370
Age 26 Y
Gender Male
Workorder 09098373

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To: 106C
Yolo County Sheriff Dept.
Attn: Robert A. LaBrash
2500 E Gibson Road
Woodland, CA 95776

Positive Findings:

<u>Compound</u>	<u>Result</u>	<u>Units</u>	<u>Matrix Source</u>
Amphetamine	48	ng/mL	Subclavian Blood
Methamphetamine	420	ng/mL	Subclavian Blood

See Detailed Findings section for additional information

Testing Requested:

Analysis Code
8051B

Description
Postmortem Toxicology - Basic, Sheriff-Coroner

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YOLO COUNTY SHERIFF-CORONER

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Gray Top Tube	9 mL	05/01/2009 12:00	Subclavian Blood	
002	Gray Top Tube	8.5 mL	05/01/2009 12:00	Subclavian Blood	

All sample volumes/weights are approximations.

Specimens received on 05/04/2009.

05-12-09 06:53 RCVD



Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Amphetamine	48	ng/mL	5.0	001 - Subclavian Blood	LC-MS/MS
Methamphetamine	420	ng/mL	5.0	001 - Subclavian Blood	LC-MS/MS

Other than the above findings, examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Reference Comments:

05-12-09 06:53 RCVD

1. Amphetamine - Subclavian Blood:

Amphetamine (Adderall, Dexedrine) is a Schedule II phenethylamine CNS-stimulant. It is used therapeutically in the treatment of narcolepsy and obesity and also in the treatment of hyperactivity in children. Amphetamine has a high potential for abuse. When used in therapy, initial doses should be small and increased gradually. In the treatment of narcolepsy, amphetamine is administered in daily divided doses of 5 to 60 mg. For obesity and children with attention deficits, usual dosage is 5 or 10 mg daily.

Following a single oral dose of 10 mg amphetamine sulfate, a reported peak blood concentration of 40 ng/mL was reached at 2 hr. Following a single 30 mg dose to adults, an average peak plasma level of 100 ng/mL was reported at 2.5 hr. A steady-state blood level of 2000 - 3000 ng/mL was reported in an addict who consumed approximately 1000 mg daily.

Overdose with amphetamine can produce restlessness, hyperthermia, convulsions, hallucinations, respiratory and/or cardiac failure. Reported blood concentrations in amphetamine-related fatalities ranged from 500 - 41000 ng/mL (mean, 9000 ng/mL). Amphetamine is also a metabolite of methamphetamine, benzphetamine and selegiline.

2. Methamphetamine - Subclavian Blood:

d-Methamphetamine is a DEA schedule II stimulant drug capable of causing hallucinations, aggressive behavior and irrational reactions. Chemically, there are two forms (isomers) of methamphetamine: l- and d-methamphetamine. The l-isomer is used in non-prescription inhalers as a decongestant and has weak CNS-stimulatory activity. The d-isomer has been used therapeutically as an anorectic agent in the treatment of obesity and has potent CNS-, cardiac- and circulatory-stimulatory activity. Amphetamine and norephedrine (phenylpropanolamine) are metabolites of methamphetamine. d-Methamphetamine is an abused substance because of its stimulatory effects and is also addictive.

A peak blood concentration of methamphetamine of 20 ng/mL was reported at 2.5 hr after an oral dosage of 12.5 mg. Blood levels of 200 - 800 ng/mL have been reported in methamphetamine abusers who exhibited violent and irrational behavior. High doses of methamphetamine can also elicit restlessness, confusion, hallucinations, circulatory collapse and convulsions.

*In this case, the level of methamphetamine determined has not been differentiated according to its isomeric forms. Differentiation of the isomers of methamphetamine is available upon request.

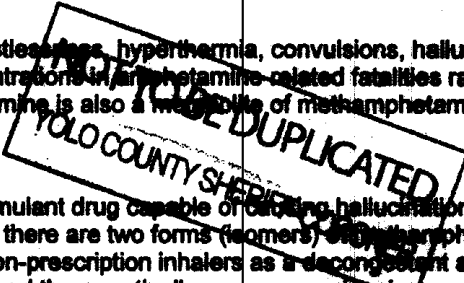
This analysis was performed under chain of custody after receipt at NMS Labs. The chain of custody documentation is on file at NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date of this report.

Workorder 09098373 was electronically signed on 05/08/2009 11:34 by:

Susan B. Crookham

Susan Crookham, Certifying Scientist





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Workorder Chain Patient ID

090983 1099437 09-0291

Analysis Summary and Reporting Limits:

Acode 50010B - Amphetamines Confirmation, Blood (Forensic) - Subclavian Blood

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamine	5.0 ng/mL	Norpseudoephedrine	5.0 ng/mL
Ephedrine	5.0 ng/mL	Phendimetrazine	10 ng/mL
MDA	5.0 ng/mL	Phenmetrazine	5.0 ng/mL
MDEA	10 ng/mL	Phentermine	10 ng/mL
MDMA	5.0 ng/mL	Phenylpropanolamine	5.0 ng/mL
Methamphetamine	5.0 ng/mL	Pseudoephedrine	5.0 ng/mL
Methylephedrine	5.0 ng/mL	Selegiline	5.0 ng/mL

Acode 8051B - Postmortem Toxicology - Basic, Blood - Subclavian Blood

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamines	20 ng/mL	Methadone	25 ng/mL
Barbiturates	0.040 mcg/mL	Opiates	20 ng/mL
Benzodiazepines	100 ng/mL	Phencyclidine	10 ng/mL
Cannabinoids	10 ng/mL	Propoxyphene	50 ng/mL
Cocaine / Metabolites	20 ng/mL		

-Analysis by Headspace Gas Chromatography (GC)

Compound	Rpt. Limit	Compound	Rpt. Limit
Acetone	1.0 mg/dL	Isopropanol	1.0 mg/dL
Ethanol	10 mg/dL	Methanol	5.0 mg/dL

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