Effective Date:

Monday, December 02, 2013

New Tests and Test Updates

In our continuing effort to provide you with the highest quality toxicology laboratory services available, we have compiled important changes regarding a number of tests we perform. Listed below are the types of changes that may be included in this notification, effective Monday, December 02, 2013

New Tests - Tests recently added to the NMS Labs test menu. *New Tests are effective immediately.*

Test Changes - Tests that have had changes to the method/ CPT code, units of measurement, scope of analysis, reference comments, or specimen requirements.

Discontinued Tests - Tests being discontinued with alternate testing suggestions.

Please use this information to update your computer systems/records. These changes are important to ensure standardization of our mutual laboratory databases.

If you have any questions about the information contained in this notification, please call our Client Support Department at (866) 522-2206. Thank you for your continued support of NMS Labs and your assistance in implementing these changes.

The CPT Codes provided in this document are based on AMA guidelines and are for informational purposes only. NMS Labs does not assume responsibility for billing errors due to reliance on the CPT Codes listed in this document.

NMS LABS
3701 Welsh Road
Willow Grove, PA 19090
www.NMSLabs.com

New Tests and Test Updates

Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
7641SP	Adrenal Insufficiency Panel, Serum/Plasma					•				
0178B	Aldactazide Profile, Blood									•
0178SP	Aldactazide Profile, Serum/Plasma									•
7632SP	Aldosterone, Serum/Plasma					•				
7642SP	Aldosteronism / Hypertension Panel, Serum/Plasma					•				
0425U	Antipyrine, Urine									•
0788SP	Azathioprine as Metabolite, Serum/Plasma				•					
4207B	Canrenone (Spironolactone metabolite), Blood		•	•	•	•	•	•	•	
4207SP	Canrenone (Spironolactone metabolite), Serum/Plasma		•	•	•	•	•	•	•	
0955B	Canrenone, Blood									•
0955SP	Canrenone, Serum/Plasma									•
0278B	DMAA, Blood								•	
0278SP	DMAA, Serum/Plasma								•	
0278U	DMAA, Urine								•	
2022SP	Eplerenone, Serum/Plasma	•								
1970U	Ethchlorvynol Overdose, Urine		•		•					
1970B	Ethchlorvynol, Blood				•					
2055SP	Ethylene Glycol Overexposure Profile, Serum/Plasma				•				•	
2440FL	Isoniazid, Fluid									•
2440TI	Isoniazid, Tissue									•
2440U	Isoniazid, Urine									•
2588B	MDPV Stimulant Designer Drug Test, Blood								•	
2588SP	MDPV Stimulant Designer Drug Test, Serum/Plasma								•	
2588U	MDPV Stimulant Designer Drug Test, Urine								•	
2615B	Mephedrone Stimulant Designer Drug Test, Blood								•	
2615SP	Mephedrone Stimulant Designer Drug Test, Serum/Plasma								•	
2615U	Mephedrone Stimulant Designer Drug Test, Urine								•	
1032B	Methcathinone (CAT), Blood								•	
1032SP	Methcathinone (CAT), Serum/Plasma								•	

Effective Date:

Monday, December 02, 2013

New Tests and Test Updates

Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
1032U	Methcathinone (CAT), Urine								•	
2584B	Methylenedioxyamphetamine, Blood								•	
2584SP	Methylenedioxyamphetamine, Serum/Plasma								•	
2584U	Methylenedioxyamphetamine, Urine								•	
3050TI	Metronidazole, Tissue									•
3050U	Metronidazole, Urine									•
3078U	Mitragynine and Metabolite (Qualitative), Urine								•	
0558U	N-Benzylpiperazine, Urine								•	
3250SP	Oxalate, Serum/Plasma				•				•	
3777B	Piperazine Designer Drugs Panel, Blood (Forensic)								•	
3777SP	Piperazine Designer Drugs Panel, Serum/Plasma (Forensic)								•	
3777U	Piperazine Designer Drugs Panel, Urine (Forensic)								•	
4033B	Pyrazinamide, Blood									•
4033U	Pyrazinamide, Urine									•
4124SP	Rubidium, Serum/Plasma								•	
4207U	Spironolactone and Metabolite, Urine									•
9568U	Synthetic Cannabinoid Metabolites Screen 2, Urine	•								
1138B	meta-Chlorophenylpiperazine (mCPP), Blood (Forensic)								•	
1138SP	meta-Chlorophenylpiperazine (mCPP), Serum/Plasma (Forensic)								•	
1138U	meta-Chlorophenylpiperazine (mCPP), Urine (Forensic)								•	

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New Tests and Test Updates

New Tests

2022SP Eplerenone, Serum/Plasma — Effective Immediately

Scope of Analysis:	Eplerenone [LC-MS/MS]
Method(s):	High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)
Purpose:	Therapeutic Drug Monitoring; This test is New York State approved
Category:	Diuretic
Specimen Requirements:	1 mL Serum or Plasma
Minimum Volume:	0.4 mL
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Specimen Container:	Plastic container (preservative-free)
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	Received Room Temperature. Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 2 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 30 day(s)

Method: High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)

Set-Up Days / TAT:	Tuesday 2 days (after set-up)
CPT Code:	83789

Compound Name / Alias	Units	RL	Reference Comment
Eplerenone Inspra®	mcg/mL	0.5	Eplerenone is a potassium sparing diuretic used in the management of chronic heart failure and hyerptension. Following a single 50 mg dose peak plasma concentrations were 1.1 +/- 0.3 mcg/mL (n=24). Following doses of 100 mg/day for 8 days peak plasma concentrations were 1.7 +/- 1.4 mcg/mL (n=72).

9568U Synthetic Cannabinoid Metabolites Screen 2, Urine — Effective Immediately

Scope of Analysis:	BB-22 3-Carboxyindole metabolite [LC-MS/MS]; F-PB-22 Carboxyindole metabolite [LC-MS/MS]; MAM-2201 Pentanoic acid metabolite [LC-MS/MS]; PB-22 3-Carboxyindole metabolite [LC-MS/MS]
Method(s):	High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)
Purpose:	Forensic Analysis; Exposure Monitoring/Abuse Monitoring; This test is New York State approved.
Category:	Synthetic Cannabinoid
Specimen Requirements:	5 mL Urine
Minimum Volume:	2.4 mL
Special Handling:	None
Specimen Container:	Plastic container (preservative-free)
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)

New Tests and Test Updates

New Tests

Method: **High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)**

Set-Up Days / TAT: Tuesday Thursday 3 days (after set-up)

CPT Code: 80100

Compound Name / Alias	Units	RL	Reference Comment
PB-22 3-Carboxyindole metabolite 1-pentylindole-3-carboxylic acid	ng/mL	2.0	
BB-22 3-Carboxyindole metabolite 1-(cyclohexylmethyl)indole-3-carboxylic acid	ng/mL	2.0	
MAM-2201 Pentanoic acid metabolite 5-[3-(4-methylnaphthalene-1-carbonyl)indol-1-yl]pentanoic acid ; JWH-122 Pentanoic acid metabolite	ng/mL	0.2	
F-PB-22 Carboxyindole metabolite 1-(5-fluoropentyl)indole-3-carboxylic acid	ng/mL	2.0	

New Tests and Test Updates

Test Changes

7641SP Adrenal Insufficiency Panel, Serum/Plasma

Summary of Changes:	Stability was changed.
Stability:	Room Temperature: Undetermined Refrigerated: 7 day(s) Frozen (-20 °C): 30 day(s) Room Temperature: Unacceptable due to potential analyte stability and/or bacteria-induced issues.

7632SP Aldosterone, Serum/Plasma

Summary of Changes:	Stability was changed.
Stability:	Room Temperature: 30 day(s) Refrigerated: 30 day(s) Frozen (-20 °C): 30 day(s)

7642SP Aldosteronism / Hypertension Panel, Serum/Plasma

Summary of Changes:	Stability was changed.
Stability:	Room Temperature: Undetermined Refrigerated: 7 day(s) Frozen (-20 °C): 30 day(s) Room Temperature: Unacceptable due to potential analyte stability and/or bacteria-induced issues.

0788SP Azathioprine as Metabolite, Serum/Plasma

Summary of Changes:	Specimen Requirements (Special Handling) were changed.
Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Collect sample 1 hour post dose. Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).

4207B Canrenone (Spironolactone metabolite), Blood

New Tests and Test Updates

Test Changes

Summary of Changes:	Test Name was changed. Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Stability was changed. Scope of Analysis was changed. Canrenone (Spironolactone Metabolite) was added. Reference Comment was changed. Units were changed. Methods/CPT Codes were changed [LC-MS/MS (83789)] Spironolactone Plus Metabolite was removed.

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	Received Room Temperature.
Stability:	Room Temperature: 2 day(s) Refrigerated: 1 month(s) Frozen (-20 °C): 1 month(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (83789): Canrenone (Spironolactone Metabolite)

Compound Name	Units	Reference Comment
Canrenone (Spironolactone Metabolite)	ng/mL	Spironolactone is rapidly metabolized to canrenone in plasma, a pharmacologically active metabolite with an average half-life of 20 h. After single doses of spironolactone in fasting subjects, reported peak plasma canrenone concentrations were: Spironolactone Dose - Peak Canrenone Concentration 200 mg - 225 ng/mL 100 mg - 98 ng/mL 50 mg - 60 ng/mL The blood/plasma ratio is unknown for canrenone.

4207SP Canrenone (Spironolactone metabolite), Serum/Plasma

New Tests and Test Updates

Test Changes

Summary of Changes:	Test Name was changed. Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Specimen Requirements (Special Handling) were changed. Stability was changed. Scope of Analysis was changed. Canrenone (Spironolactone Metabolite) was added. Reference Comment was changed. Units were changed. Methods/CPT Codes were changed [LC-MS/MS (83789)] Spironolactone Plus Metabolite was removed.

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube.
Rejection Criteria:	Received Room Temperature. Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 2 day(s) Refrigerated: 1 month(s) Frozen (-20 °C): 30 day(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (83789): Canrenone (Spironolactone Metabolite)

Compound Name	Units	Reference Comment
Canrenone (Spironolactone Metabolite)	ng/mL	Spironolactone is rapidly metabolized to canrenone in plasma, a pharmacologically active metabolite with an average half-life of 20 h. After single doses of spironolactone in fasting subjects, reported peak plasma canrenone concentrations were: Spironolactone Dose - Peak Canrenone Concentration 200 mg - 225 ng/mL 100 mg - 98 ng/mL 50 mg - 60 ng/mL

0278B DMAA, Blood

Summary of Changes:	Reference Comment was changed.
Scope of Analysis: Method (CPT Code)	LC-MS/MS (83789): DMAA

New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
DMAA	ng/mL	DMAA is a simple aliphatic amine which is believed to have stimulant properties mediated through the promotion of catecholamine release. This compound is sold as a nutritional supplement in the United States. DMAA use has been linked to at least two deaths, although blood concentrations are not available.

0278SP DMAA, Serum/Plasma

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): DMAA
Method (CPT Code)

Compound Name	Units	Reference Comment
DMAA	ng/mL	DMAA is a simple aliphatic amine which is believed to have stimulant properties mediated through the promotion of catecholamine release. This compound is sold as a nutritional supplement in the United States. DMAA use has been linked to at least two deaths, although serum or plasma concentrations are not available.

0278U DMAA, Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): DMAA
Method (CPT Code)

Compound Name	Units	Reference Comment
DMAA	ng/mL	DMAA is a simple aliphatic amine which is believed to have stimulant properties mediated through the promotion of catecholamine release. This compound is sold as a nutritional supplement in the United States. DMAA use has been linked to at least two deaths.

1970U Ethchlorvynol Overdose, Urine

Summary of Changes: Test Name was changed.
Specimen Requirements were changed.

New Tests and Test Updates

Test Changes

Specimen Requirements: 8 mL Urine
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None

1970B Ethchlorvynol, Blood

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.

Specimen Requirements: 8 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None

2055SP Ethylene Glycol Overexposure Profile, Serum/Plasma

Summary of Changes: Specimen Requirements (Special Handling) were changed.
Reference Comment was changed.

Specimen Requirements: 5 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Serum: Collect sample in Red top tube
Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube.
Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Received Room Temperature. Gray top tube (Sodium Fluoride / Potassium Oxalate). Polymer gel separation tube (SST or PST).
Scope of Analysis: EZA (83945): Oxalate
Method (CPT Code) GC (82693): Ethylene Glycol
IC (83921): Formic Acid

Compound Name	Units	Reference Comment
Oxalate	uMol/L	Normal: 2.5 (SD 0.7) uMol/L plasma Toxic: 200 uMol/L plasma

2588B MDPV Stimulant Designer Drug Test, Blood

New Tests and Test Updates

Test Changes

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): MDPV
Method (CPT Code)

Compound Name	Units	Reference Comment
MDPV	ng/mL	MDPV is a synthetic stimulant drug reported to have effects similar to methylphenidate at low doses and cocaine at high doses. Desired outcomes following use include increased energy and sociability, increased concentration, psychedelic effects and sexual stimulation. Reported adverse effects include insomnia, severe agitation/anxiety, panic attacks, kidney pain, stomach cramps, tachycardia, hypertension, dilated pupils, headache, tinnitus and peripheral neuropathies and dizziness. Use of MDPV has been linked to the popular 'Designer Drug' movement and may be present in products sold as 'Legal High' or 'Bath Salts' for recreational purposes. The drug is usually taken orally, but can also be insufflated or vaporized. Blood concentrations in 17 fatalities were 10 - 5000 ng/mL. Blood concentrations in 9 cases of drivers exhibiting signs of impairment were 6 - 360 ng/ml; other impairing drugs were often found in conjuction with MDPV.

2588SP MDPV Stimulant Designer Drug Test, Serum/Plasma

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): MDPV
Method (CPT Code)

Compound Name	Units	Reference Comment
MDPV	ng/mL	MDPV is a synthetic stimulant drug reported to have effects similar to methylphenidate at low doses and cocaine at high doses. Desired outcomes following use include increased energy and sociability, increased concentration, psychedelic effects and sexual stimulation. Reported adverse effects include insomnia, severe agitation/anxiety, panic attacks, kidney pain, stomach cramps, tachycardia, hypertension, dilated pupils, headache, tinnitus and peripheral neuropathies and dizziness. Use of MDPV has been linked to the popular 'Designer Drug' movement and may be present in

New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		products sold as 'Legal High' or 'Bath Salts' for recreational purposes. The drug is usually taken orally, but can also be insufflated or vaporized. Blood concentrations in 17 fatalities were 10 - 5000 ng/mL. Blood concentrations in 9 cases of drivers exhibiting signs of impairment were 6 - 360 ng/ml; other impairing drugs were often found in conjuction with MDPV. MDPV is known to have limited stability in serum and plasma which may be dependent upon pH, collection tube, and storage temperature. Negative results should be interpreted with caution. The ratio of whole blood concentration to serum or plasma concentration is unknown for this analyte.

2588U MDPV Stimulant Designer Drug Test, Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): MDPV
Method (CPT Code)

Compound Name	Units	Reference Comment
MDPV	ng/mL	MDPV is a synthetic stimulant drug reported to have effects similar to methylphenidate at low doses and cocaine at high doses. Desired outcomes following use include increased energy and sociability, increased concentration, psychedelic effects and sexual stimulation. Reported adverse effects include insomnia, severe agitation/anxiety, panic attacks, kidney pain, stomach cramps, tachycardia, hypertension, dilated pupils, headache, tinnitus and peripheral neuropathies and dizziness. Use of MDPV has been linked to the popular 'Designer Drug' movement and may be present in products sold as 'Legal High' or 'Bath Salts' for recreational purposes. The drug is usually taken orally, but can also be insufflated or vaporized.

2615B Mephedrone Stimulant Designer Drug Test, Blood

Summary of Changes: Reference Comment was changed.

New Tests and Test Updates

Test Changes

Scope of Analysis: LC-MS/MS (83789): Mephedrone
Method (CPT Code)

Compound Name	Units	Reference Comment
Mephedrone	ng/mL	Mephedrone is a psychoactive phenethylamine derivative that is structurally related to methcathinone and amphetamine. It is abused for its perceived 'ecstasy like' effects of euphoria, excitement, and alertness. Reported adverse effects include peripheral vasoconstriction resulting in a bruised appearance on the arms and legs, loss of appetite, poor concentration, increased heart rate, sweating with an odor, and dilation of the pupils. In two fatalities where mephedrone intoxication was determined to be the cause of death blood concentrations were 22000 ng/mL and 3300 ng/mL.

2615SP Mephedrone Stimulant Designer Drug Test, Serum/Plasma

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): Mephedrone
Method (CPT Code)

Compound Name	Units	Reference Comment
Mephedrone	ng/mL	Mephedrone is a psychoactive phenethylamine derivative that is structurally related to methcathinone and amphetamine. It is abused for its perceived 'ecstasy like' effects of euphoria, excitement, and alertness. Reported adverse effects include peripheral vasoconstriction resulting in a bruised appearance on the arms and legs, loss of appetite, poor concentration, increased heart rate, sweating with an odor, and dilation of the pupils. In two fatalities where mephedrone intoxication was determined to be the cause of death blood concentrations were 22000 ng/mL and 3300 ng/mL. The ratio of whole blood concentration to serum or plasma concentration is unknown for this analyte.

2615U Mephedrone Stimulant Designer Drug Test, Urine

New Tests and Test Updates

Test Changes

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): Mephedrone
Method (CPT Code)

Compound Name	Units	Reference Comment
Mephedrone	ng/mL	Mephedrone is a psychoactive phenethylamine derivative that is structurally related to methcathinone and amphetamine. It is abused for its perceived 'ecstasy like' effects of euphoria, excitement, and alertness. Reported adverse effects include peripheral vasoconstriction resulting in a bruised appearance on the arms and legs, loss of appetite, poor concentration, increased heart rate, sweating with an odor, and dilation of the pupils.

1032B Methcathinone (CAT), Blood

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): Methcathinone
Method (CPT Code)

Compound Name	Units	Reference Comment
Methcathinone	ng/mL	Methcathinone, a CNS-stimulant, is similar to methamphetamine in that it can reduce fatigue and block hunger. The drug can also trigger impulsive, erratic behavior by increasing the action of two neurotransmitters, norepinephrine and dopamine. At higher dosages, or with chronic use, feelings of heightened confidence, arousal, paranoia, irritability, and severe depression are exhibited. Physical side effects include loss of appetite, profuse sweating, dehydration, elevated heart rate and body temperature, and uncontrolled shaking. Psychological effects include anxiety and irritability. Tolerance often develops rapidly as does dependence. Early withdrawal symptoms of anxiety and profuse sweating can precede convulsions, hallucinations, and severe depression. No reference blood concentration data for this compound have been reported.

1032SP Methcathinone (CAT), Serum/Plasma

New Tests and Test Updates

Test Changes

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): Methcathinone
Method (CPT Code)

Compound Name	Units	Reference Comment
Methcathinone	ng/mL	Methcathinone, a CNS-stimulant, is similar to methamphetamine in that it can reduce fatigue and block hunger. The drug can also trigger impulsive, erratic behavior by increasing the action of two neurotransmitters, norepinephrine and dopamine. At higher dosages, or with chronic use, feelings of heightened confidence, arousal, paranoia, irritability, and severe depression are exhibited. Physical side effects include loss of appetite, profuse sweating, dehydration, elevated heart rate and body temperature, and uncontrolled shaking. Psychological effects include anxiety and irritability. Tolerance often develops rapidly as does dependence. Early withdrawal symptoms of anxiety and profuse sweating can precede convulsions, hallucinations, and severe depression. No reference serum or plasma concentration data for this compound have been reported.

1032U Methcathinone (CAT), Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): Methcathinone
Method (CPT Code)

Compound Name	Units	Reference Comment
Methcathinone	ng/mL	Methcathinone, a CNS-stimulant, is similar to methamphetamine in that it can reduce fatigue and block hunger. The drug can also trigger impulsive, erratic behavior by increasing the action of two neurotransmitters, norepinephrine and dopamine. At higher dosages, or with chronic use, feelings of heightened confidence, arousal, paranoia, irritability, and severe depression are exhibited. Physical side effects include loss of appetite, profuse sweating, dehydration, elevated heart rate and body

New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		temperature, and uncontrolled shaking. Psychological effects include anxiety and irritability. Tolerance often develops rapidly as does dependence. Early withdrawal symptoms of anxiety and profuse sweating can precede convulsions, hallucinations, and severe depression.

2584B Methylenedioxyamphetamine, Blood

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (82145): MDA
Method (CPT Code)

Compound Name	Units	Reference Comment
MDA	ng/mL	MDA is a metabolite of MDMA and methylenedioxyethylamphetamine (MDEA) and is abused for its central nervous system stimulant and hallucinogenic properties. The peak concentration of the MDA metabolite following a 110 mg dose of MDMA was reported as 28 ng/mL at 4 hours. The blood to plasma ratio of MDA is approximately 1.2 - 1.3

2584SP Methylenedioxyamphetamine, Serum/Plasma

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (82145): MDA
Method (CPT Code)

Compound Name	Units	Reference Comment
MDA	ng/mL	MDA is a metabolite of MDMA and methylenedioxyethylamphetamine (MDEA) and is abused for its central nervous system stimulant and hallucinogenic properties. The peak concentration of the MDA metabolite following a 110 mg dose of MDMA was reported as 28 ng/mL at 4 hours.

2584U Methylenedioxyamphetamine, Urine

Summary of Changes: Reference Comment was changed.

New Tests and Test Updates

Test Changes

Scope of Analysis: LC-MS/MS (82145): MDA
Method (CPT Code)

Compound Name	Units	Reference Comment
MDA	ng/mL	MDA is a metabolite of MDMA and methylenedioxyethylamphetamine (MDEA) and is abused for its central nervous system stimulant and hallucinogenic properties.

3078U Mitragynine and Metabolite (Qualitative), Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: LC-MS/MS (83789): 7-Hydroxymitragynine, Mitragynine
Method (CPT Code)

Compound Name	Units	Reference Comment
7-Hydroxymitragynine	ng/mL	7-Hydroxymitragynine is an active metabolite of mitragynine and a natural alkaloid found in the Kratom plant. It is believed to have stimulant and analgesic properties.
Mitragynine	ng/mL	Mitragynine is an alkaloid found in the plant Kratom which originates from Asia. The leaves of plant are consumed for their stimulant and analgesic effects and these effects are attributed to mitragynine. Plant extracts are sold for their medicinal use and may be subject to abuse. Some Kratom materials have also been reported to contain O-desmethyltramadol presumably from exogenous sources. Mitragynine is metabolized to 7-OH mitragynine which is also believed to be active.

0558U N-Benzylpiperazine, Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): BZP
Method (CPT Code)

Compound Name	Units	Reference Comment
BZP	ng/mL	BZP is a synthetic sympathomimetic compound often categorized as a 'designer drug'. Since the 1990s the compound has gained popularity as a stimulant drug of abuse, having a potency of approximately one-tenth that of dextroamphetamine. N-BZP is often mixed with a similar compound, trifluoromethylphenylpiperazine (TFMPP) in order to mimic the psychoactive effects of methylenedioxymethamphetamine (MDMA) and methylenedioxyamphetamine (MDA). A 100 mg oral dose of

New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		the drug is believed to elicit effects for 6 to 8 hours and will produce euphoria, wakefulness, and increased vigilance. Users also describe negative side effects including anxiety, vomiting, headache, dry mouth, dilated pupils, difficulty urinating, cardiac palpitations, confusion, and seizures.

3250SP Oxalate, Serum/Plasma

Summary of Changes: Specimen Requirements (Special Handling) were changed.
Reference Comment was changed.

Specimen Requirements: 3 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Serum: Collect sample in Red top tube
Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube.
Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Received Room Temperature. Gray top tube (Sodium Fluoride / Potassium Oxalate). Polymer gel separation tube (SST or PST).
Scope of Analysis: Method (CPT Code): EZA (83945): Oxalate

Compound Name	Units	Reference Comment
Oxalate	uMol/L	Normal: 2.5 (SD 0.7) uMol/L plasma Toxic: 200 uMol/L plasma

3777B Piperazine Designer Drugs Panel, Blood (Forensic)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Method (CPT Code): GC/MS (82542): TFMPP, BZP, mCPP

Compound Name	Units	Reference Comment
TFMPP	ng/mL	TFMPP is a synthetic piperazine derivative categorized as a 'designer drug'. TFMPP is available in tablet and capsule forms and is commonly only present in products that contain N-Benzylpiperazine (BZP). TFMPP is often mixed with BZP in order to mimic the psychoactive effects of methylenedioxymethamphetamine (MDMA) and methylenedioxyamphetamine (MDA).

New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		There is little information concerning blood or plasma concentrations of TFMPP. In one study, serum concentrations of TFMPP in 3 drug abusers were reported to be between 260 and 270 ng/mL. In two autopsy cases, postmortem femoral blood was found to contain 50 and 150 ng/mL of the compound.
mCPP	ng/mL	mCPP is an active metabolite of the prescription antidepressants Trazodone and Nefazodone. mCPP is also encountered in illicit tablets sold as Ecstasy. Reported concentrations of mCPP in these tablets range from 2 - 357 mg/tablet. Tablets may contain only mCPP or may be mixed with other drugs such as MDMA, TFMPP or caffeine. mCPP has similar subjective stimulant and hallucinogenic effects as MDMA, but unlike MDMA has not been found to increase blood pressure or heart rate. Reported adverse effects include nausea, vomiting, dizziness, sweating, induction of migraine-like headache, anxiety, depressive symptoms and paranoia. A woman reported to have taken 3 tablets containing 30.3 mg mCPP/tablet (total dose = 90.9 mg) had a plasma mCPP concentration of 320 ng/mL. The blood to serum/plasma ratio of mCPP is not known.

3777SP Piperazine Designer Drugs Panel, Serum/Plasma (Forensic)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): TFMPP, BZP, mCPP
Method (CPT Code)

Compound Name	Units	Reference Comment
TFMPP	ng/mL	TFMPP is a synthetic piperazine derivative categorized as a 'designer drug'. TFMPP is available in tablet and capsule forms and is commonly only present in products that contain N-Benzylpiperazine (BZP). TFMPP is often mixed with BZP in order to mimic the psychoactive effects of methylenedioxymethamphetamine (MDMA) and methylenedioxyamphetamine (MDA).

Test Changes

Compound Name	Units	Reference Comment
		There is little information concerning blood or plasma concentrations of TFMPP. In one study, serum concentrations of TFMPP in 3 drug abusers were reported to be between 260 and 270 ng/mL. In two autopsy cases, postmortem femoral blood was found to contain 50 and 150 ng/mL of the compound.
mCPP	ng/mL	mCPP is an active metabolite of the prescription antidepressants Trazodone and Nefazodone. mCPP is also encountered in illicit tablets sold as Ecstasy. Reported concentrations of mCPP in these tablets range from 2 - 357 mg/tablet. Tablets may contain only mCPP or may be mixed with other drugs such as MDMA, TFMPP or caffeine. mCPP has similar subjective stimulant and hallucinogenic effects as MDMA, but unlike MDMA has not been found to increase blood pressure or heart rate. Reported adverse effects include nausea, vomiting, dizziness, sweating, induction of migraine-like headache, anxiety, depressive symptoms and paranoia. A woman reported to have taken 3 tablets containing 30.3 mg mCPP/tablet (total dose = 90.9 mg) has a plasma mCPP concentration of 320 ng/mL.

3777U Piperazine Designer Drugs Panel, Urine (Forensic)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): TFMPP, BZP, mCPP
Method (CPT Code)

Compound Name	Units	Reference Comment
TFMPP	ng/mL	TFMPP is a synthetic piperazine derivative categorized as a 'designer drug'. TFMPP is available in tablet and capsules and is commonly only present in products that contain N-benzylpiperazine (N-BZP). TFMPP is often mixed with N-BZP in order to mimic the psychoactive effects of methylenedioxymethamphetamine (MDMA) and methylenedioxyamphetamine (MDA).
BZP	ng/mL	N-BZP (N-benzylpiperazine, BZP) is a synthetic sympathomimetic compound often categorized as a 'designer drug'. Since the 1990s the compound has gained popularity as a stimulant drug of abuse, having a potency of approximately one-tenth that of dextroamphetamine. N-BZP is often mixed with a similar compound, trifluoromethylphenylpiperazine (TFMPP) in

New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		order to mimic the psychoactive effects of methylenedioxymethamphetamine (MDMA) and methylenedioxyamphetamine (MDA). A 100 mg oral dose of the drug is believed to elicit effects for 6 to 8 hours and will produce euphoria, wakefulness, and increased vigilance. Users also describe negative side effects including anxiety, vomiting, headache, dry mouth, dilated pupils, difficulty urinating, cardiac palpitations, confusion, and seizures.
mCPP	ng/mL	mCPP is an active metabolite of the prescription antidepressants Trazodone and Nefazodone. mCPP is also encountered in illicit tablets sold as Ecstasy. Reported concentrations of mCPP in these tablets range from 2 - 357 mg/tablet. Tablets may contain only mCPP or may be mixed with other drugs such as MDMA, TFMPP or caffeine. mCPP has similar subjective stimulant and hallucinogenic effects as MDMA, but unlike MDMA has not been found to increase blood pressure or heart rate. Reported adverse effects include nausea, vomiting, dizziness, sweating, induction of migraine-like headache, anxiety, depressive symptoms and paranoia.

4124SP Rubidium, Serum/Plasma

Summary of Changes: Reference Comment was changed.

Scope of Analysis: AES (83018): Rubidium
Method (CPT Code)

Compound Name	Units	Reference Comment
Rubidium	mcg/dL	Normally 10 – 50 mcg/dL.

1138B meta-Chlorophenylpiperazine (mCPP), Blood (Forensic)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): mCPP
Method (CPT Code)

New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
mCPP	ng/mL	mCPP is an active metabolite of the prescription antidepressants Trazodone and Nefazodone. mCPP is also encountered in illicit tablets sold as Ecstasy. Reported concentrations of mCPP in these tablets range from 2 - 357 mg/tablet. Tablets may contain only mCPP or may be mixed with other drugs such as MDMA, TFMPP or caffeine. mCPP has similar subjective stimulant and hallucinogenic effects as MDMA, but unlike MDMA has not been found to increase blood pressure or heart rate. Reported adverse effects include nausea, vomiting, dizziness, sweating, induction of migraine-like headache, anxiety, depressive symptoms and paranoia. A woman reported to have taken 3 tablets containing 30.3 mg mCPP/tablet (total dose = 90.9 mg) had a plasma mCPP concentration of 320 ng/mL. The blood to serum/plasma ratio of mCPP is not known.

1138SP meta-Chlorophenylpiperazine (mCPP), Serum/Plasma (Forensic)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): mCPP
Method (CPT Code)

Compound Name	Units	Reference Comment
mCPP	ng/mL	mCPP is an active metabolite of the prescription antidepressants Trazodone and Nefazodone. mCPP is also encountered in illicit tablets sold as Ecstasy. Reported concentrations of mCPP in these tablets range from 2 - 357 mg/tablet. Tablets may contain only mCPP or may be mixed with other drugs such as MDMA, TFMPP or caffeine. mCPP has similar subjective stimulant and hallucinogenic effects as MDMA, but unlike MDMA has not been found to increase blood pressure or heart rate. Reported adverse effects include nausea, vomiting, dizziness, sweating, induction of migraine-like headache, anxiety, depressive symptoms and paranoia. A woman reported to have taken 3 tablets containing 30.3 mg mCPP/tablet (total dose = 90.9 mg) had a plasma mCPP concentration of 320 ng/mL.

1138U meta-Chlorophenylpiperazine (mCPP), Urine (Forensic)

New Tests and Test Updates

Test Changes

Summary of Changes: Reference Comment was changed.

Scope of Analysis: GC/MS (82542): mCPP
Method (CPT Code)

Compound Name	Units	Reference Comment
mCPP	ng/mL	mCPP is an active metabolite of the prescription antidepressants Trazodone and Nefazodone. mCPP is also encountered in illicit tablets sold as Ecstasy. Reported concentrations of mCPP in these tablets range from 2 - 357 mg/tablet. Tablets may contain only mCPP or may be mixed with other drugs such as MDMA, TFMPP or caffeine. mCPP has similar subjective stimulant and hallucinogenic effects as MDMA, but unlike MDMA has not been found to increase blood pressure or heart rate. Reported adverse effects include nausea, vomiting, dizziness, sweating, induction of migraine-like headache, anxiety, depressive symptoms and paranoia.

New Tests and Test Updates

Discontinued Tests

Test Code	Test Name	Alternative Test
0178B	Aldactazide Profile, Blood	4207B - Canrenone (Spironolactone metabolite), Blood
0178SP	Aldactazide Profile, Serum/Plasma	4207SP - Canrenone (Spironolactone metabolite), Serum/Plasma
0425U	Antipyrine, Urine	0425B - Antipyrine, Blood 0425SP - Antipyrine, Serum/Plasma
0955B	Canrenone, Blood	4207B - Canrenone (Spironolactone metabolite), Blood
0955SP	Canrenone, Serum/Plasma	4207SP - Canrenone (Spironolactone metabolite), Serum/Plasma
2440FL	Isoniazid, Fluid	2440SP - Isoniazid, Serum/Plasma
2440TI	Isoniazid, Tissue	2440SP - Isoniazid, Serum/Plasma
2440U	Isoniazid, Urine	2440SP - Isoniazid, Serum/Plasma
3050TI	Metronidazole, Tissue	3050B - Metronidazole, Blood 3050SP - Metronidazole, Serum/Plasma
3050U	Metronidazole, Urine	3050B - Metronidazole, Blood 3050SP - Metronidazole, Serum/Plasma
4033B	Pyrazinamide, Blood	4033SP - Pyrazinamide, Serum/Plasma
4033U	Pyrazinamide, Urine	4033SP - Pyrazinamide, Serum/Plasma
4207U	Spironolactone and Metabolite, Urine	4207SP - Canrenone (Spironolactone metabolite), Serum/Plasma

NMS LABS
3701 Welsh Road
Willow Grove, PA 19090
www.NMSLabs.com