



Effective Date:
Monday, March 25, 2019

Test Updates

Immediate Action

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, March 25, 2019

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.



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Test Updates

Test Code	Test Name	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
0088U	Acetonitrile Exposure Profile, Urine		•					•	
0148U	Acrylonitrile Exposure Profile, Urine		•					•	
6303B	Firefighter Core Baseline Profile, Blood					•		•	
2490B	Lead and ZPP, Blood					•		•	
10083B	Metals Panel 4, Blood (CSA)					•		•	
2663B	Metals/Metalloids Panel 3, Blood					•		•	
54279U	Methylphenidate and Metabolite Confirmation (Qualitative) (DUID/DRE), Urine			•	•				
5132U	Methylphenidate and Metabolite Confirmation, Urine			•	•				
52079U	Methylphenidate and Metabolite Confirmation, Urine			•	•				
9193U	Methylphenidate and Metabolite Screen, Urine			•	•				
3020U	Methylphenidate and Metabolite, Urine			•	•				
4239SP	Sulfide Exposure Biouptake Marker, Serum/Plasma		•	•	•				
4440SP	Thiocyanate, Serum/Plasma		•	•	•			•	
4440U	Thiocyanate, Urine		•	•				•	
4472SP	Thiosulfate, Serum/Plasma		•	•	•			•	
4472U	Thiosulfate, Urine		•	•	•			•	
4885B	ZPP (Zinc Protoporphyrin), Blood					•		•	



Test Updates

Test Changes

0088U Acetonitrile Exposure Profile, Urine

Summary of Changes: Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (84430)]

Scope of Analysis: GC/MS (83921): Formic Acid, Formic Acid (Creatinine corrected)
Method (CPT Code) LC-MS/MS (84430): Thiocyanate, Thiocyanate (Creatinine corrected)
Colorimetry (82570): Creatinine

Compound Name	Units	Reference Comment
Thiocyanate	mcg/mL	CDC/NHANES (2013-2014) U.S. general adult population: Non-smokers: Usually less than 3.6 mcg/mL Smokers: Usually less than 15 mcg/mL
Thiocyanate (Creatinine corrected)	mg/g Creat	CDC/NHANES (2013-2014) U.S. general adult population: Non-smokers: Usually less than 3.7 mg/g creatinine Smokers: Usually less than 16 mg/g creatinine

0148U Acrylonitrile Exposure Profile, Urine

Summary of Changes: Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (84430)]

Scope of Analysis: GC/MS (83921): Formic Acid, Formic Acid (Creatinine corrected)
Method (CPT Code) LC-MS/MS (84430): Thiocyanate, Thiocyanate (Creatinine corrected)
Colorimetry (82570): Creatinine

Compound Name	Units	Reference Comment
Thiocyanate	mcg/mL	CDC/NHANES (2013-2014) U.S. general adult population: Non-smokers: Usually less than 3.6 mcg/mL Smokers: Usually less than 15 mcg/mL
Thiocyanate (Creatinine corrected)	mg/g Creat	CDC/NHANES (2013-2014) U.S. general adult population: Non-smokers: Usually less than 3.7 mg/g creatinine Smokers: Usually less than 16 mg/g creatinine

6303B Firefighter Core Baseline Profile, Blood

Summary of Changes: Scope of Analysis was changed.
ZPP (OSHA Converted Units) was added.
Reference Comment was changed.

Scope of Analysis: ICP/MS (83655): Lead
Method (CPT Code) H (84202): ZPP, ZPP (OSHA Converted Units)
Headspace GC (84600): Benzene, Ethylbenzene, Styrene, Toluene, Xylenes (o,m,p), n-Heptane, n-Hexane, Methylpentanes (2- and 3- Isomers), Pentane, n-Butanol, Ethanol, Isopropanol, n-Propanol, Methanol, Acetaldehyde, Acetone, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Methyl n-Butyl Ketone, Ethyl Acetate, Diethyl Ether, Methyl Tertiary Butyl Ether



Test Updates

Test Changes

Compound Name	Units	Reference Comment
ZPP	mcmol/mol heme	Normal range for Zinc Protoporphyrin (ZPP) is 30 – 80 mcmol/mol heme.
ZPP (OSHA Converted Units)	mcg/dL	This result is converted from mcmol/mol heme assuming a hematocrit of 42% for adults. The conversion factor is mcmol/mol heme x 0.544 = mcg/dL. OSHA occupational threshold is 100 mcg/dL blood.

2490B Lead and ZPP, Blood

Summary of Changes: Scope of Analysis was changed.
ZPP (OSHA Converted Units) was added.
Reference Comment was changed.

Scope of Analysis: ICP/MS (83655): Lead
Method (CPT Code) H (84202): ZPP, ZPP (OSHA Converted Units)

Compound Name	Units	Reference Comment
ZPP	mcmol/mol heme	Normal range for Zinc Protoporphyrin (ZPP) is 30 – 80 mcmol/mol heme.
ZPP (OSHA Converted Units)	mcg/dL	This result is converted from mcmol/mol heme assuming a hematocrit of 42% for adults. The conversion factor is mcmol/mol heme x 0.544 = mcg/dL. OSHA occupational threshold is 100 mcg/dL blood.

10083B Metals Panel 4, Blood (CSA)

Summary of Changes: Scope of Analysis was changed.
ZPP (OSHA Converted Units) was added.
Reference Comment was changed.

Scope of Analysis: ICP/MS (82175): Arsenic, Lead
Method (CPT Code) ICP/MS (82300, None): Cadmium
H (84202): ZPP, ZPP (OSHA Converted Units)
ICP/MS (83825): Mercury

Compound Name	Units	Reference Comment
ZPP	mcmol/mol heme	Normal range for Zinc Protoporphyrin (ZPP) is 30 – 80 mcmol/mol heme.
ZPP (OSHA Converted Units)	mcg/dL	This result is converted from mcmol/mol heme assuming a hematocrit of 42% for adults. The conversion factor is mcmol/mol heme x 0.544 = mcg/dL. OSHA occupational threshold is 100 mcg/dL blood.

2663B Metals/Metalloids Panel 3, Blood



Test Updates

Test Changes

Summary of Changes: Scope of Analysis was changed.
ZPP (OSHA Converted Units) was added.
Reference Comment was changed.

Scope of Analysis: ICP/MS (82300, None): Cadmium, Chromium
Method (CPT Code) H (84202): ZPP, ZPP (OSHA Converted Units)
ICP/MS (82175): Arsenic, Lead
ICP/MS (83825): Mercury

Compound Name	Units	Reference Comment
ZPP	mcmol/mol heme	Normal range for Zinc Protoporphyrin (ZPP) is 30 – 80 mcmol/mol heme.
ZPP (OSHA Converted Units)	mcg/dL	This result is converted from mcmol/mol heme assuming a hematocrit of 42% for adults. The conversion factor is mcmol/mol heme x 0.544 = mcg/dL. OSHA occupational threshold is 100 mcg/dL blood.

54279U Methylphenidate and Metabolite Confirmation (Qualitative) (DUID/DRE), Urine

Summary of Changes: Specimen Requirements (Transport Temperature) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.

Specimen Requirements: 1 mL Urine
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: Received Room Temperature.
Stability: Room Temperature: Not Stable
Refrigerated: 20 day(s)
Frozen (-20 °C): 5 month(s)

5132U Methylphenidate and Metabolite Confirmation, Urine

Summary of Changes: Specimen Requirements (Transport Temperature) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.

Specimen Requirements: 1 mL Urine
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: Received Room Temperature.



Test Updates

Test Changes

Stability: Room Temperature: Not Stable
Refrigerated: 20 day(s)
Frozen (-20 °C): 5 month(s)

52079U Methylphenidate and Metabolite Confirmation, Urine

Summary of Changes: Specimen Requirements (Transport Temperature) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.

Specimen Requirements: 1 mL Urine
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: Received Room Temperature.
Stability: Room Temperature: Not Stable
Refrigerated: 20 day(s)
Frozen (-20 °C): 5 month(s)

9193U Methylphenidate and Metabolite Screen, Urine

Summary of Changes: Specimen Requirements (Transport Temperature) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.

Specimen Requirements: 2 mL Urine
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: Received Room Temperature.
Stability: Room Temperature: Not Stable
Refrigerated: 20 day(s)
Frozen (-20 °C): 5 month(s)

3020U Methylphenidate and Metabolite, Urine

Summary of Changes: Specimen Requirements (Transport Temperature) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.



Test Updates

Test Changes

Specimen Requirements: 1 mL Urine
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: Received Room Temperature.
Stability: Room Temperature: Not Stable
Refrigerated: 20 day(s)
Frozen (-20 °C): 5 month(s)

4239SP Sulfide Exposure Biouptake Marker, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.
Methods/CPT Codes were changed [LC-MS/MS (82542)]

Specimen Requirements: 2 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Red top tube (no additive)
Light Protection: Not Required
Special Handling: Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Light Green top tube (Lithium Heparin). Green top tube (Lithium Heparin). Light Green top tube (Lithium Heparin with gel). Green top tube (Sodium Heparin). Polymer gel separation tube (SST or PST). Lavender top tube (EDTA).
Stability: Room Temperature: 7 day(s)
Refrigerated: 25 day(s)
Frozen (-20 °C): 24 day(s)
Scope of Analysis: LC-MS/MS (82542): Thiosulfate
Method (CPT Code)

4440SP Thiocyanate, Serum/Plasma

Summary of Changes: Specimen Requirements (Specimen Container) were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (84430)]



Test Updates

Test Changes

Specimen Requirements: 1 mL Serum or Plasma
 Transport Temperature: Refrigerated
 Specimen Container: Plastic container (preservative-free)
 Light Protection: Not Required
 Special Handling: 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).
 Stability: Room Temperature: 30 day(s)
 Refrigerated: 5 month(s)
 Frozen (-20 °C): 6 month(s)
 Scope of Analysis: LC-MS/MS (84430): Thiocyanate
 Method (CPT Code)

Compound Name	Units	Reference Comment
Thiocyanate	mcg/mL	Normal: Non-smokers: Usually less than 8 mcg/mL Smokers: Usually less than 16 mcg/mL Nitroprusside therapeutic range: 6 - 29 mcg/mL

4440U Thiocyanate, Urine

Summary of Changes: Specimen Requirements were changed.
 Reference Comment was changed.
 Methods/CPT Codes were changed [LC-MS/MS (84430)]

Specimen Requirements: 2 mL Urine
 Transport Temperature: Refrigerated
 Specimen Container: Plastic container (preservative-free)
 Light Protection: Not Required
 Special Handling: None
 Rejection Criteria: Received Room Temperature.
 Scope of Analysis: LC-MS/MS (84430): Thiocyanate, Thiocyanate (Creatinine corrected)
 Method (CPT Code) Colorimetry (82570): Creatinine

Compound Name	Units	Reference Comment
Thiocyanate	mcg/mL	CDC/NHANES (2013-2014) U.S. general adult population: Non-smokers: Usually less than 3.6 mcg/mL Smokers: Usually less than 15 mcg/mL
Thiocyanate (Creatinine corrected)	mg/g Creat	CDC/NHANES (2013-2014) U.S. general adult population: Non-smokers: Usually less than 3.7 mg/g creatinine Smokers: Usually less than 16 mg/g creatinine

4472SP Thiosulfate, Serum/Plasma



Test Updates

Test Changes

Summary of Changes: Specimen Requirements were changed.
 Specimen Requirements (Specimen Container) were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Stability was changed.
 Reference Comment was changed.
 Methods/CPT Codes were changed [LC-MS/MS (82542)]

Specimen Requirements: 2 mL Serum or Plasma
 Transport Temperature: Refrigerated
 Specimen Container: Red top tube (no additive)
 Light Protection: Not Required
 Special Handling: Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
 Rejection Criteria: Light Green top tube (Lithium Heparin). Green top tube (Lithium Heparin). Light Green top tube (Lithium Heparin with gel). Green top tube (Sodium Heparin). Polymer gel separation tube (SST or PST). Lavender top tube (EDTA).
 Stability: Room Temperature: 7 day(s)
 Refrigerated: 25 day(s)
 Frozen (-20 °C): 24 day(s)
 Scope of Analysis: LC-MS/MS (82542): Thiosulfate
 Method (CPT Code)

Compound Name	Units	Reference Comment
Thiosulfate	mcg/mL	Reference range: Up to 2 mcg/mL.

4472U Thiosulfate, Urine

Summary of Changes: Specimen Requirements were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Stability was changed.
 Reference Comment was changed.
 Methods/CPT Codes were changed [LC-MS/MS (82542)]

Specimen Requirements: 4 mL Urine
 Transport Temperature: Refrigerated
 Specimen Container: Plastic container (preservative-free)
 Light Protection: Not Required
 Special Handling: None
 Rejection Criteria: Received Room Temperature. Received Frozen.
 Stability: Room Temperature: 2 day(s)
 Refrigerated: 30 day(s)
 Frozen (-20 °C): 1 day(s)
 Scope of Analysis: Colorimetry (82570): Creatinine
 Method (CPT Code) LC-MS/MS (82542): Thiosulfate, Thiosulfate (Creatinine corrected)



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Compound Name	Units	Reference Comment
Thiosulfate	mcg/mL	Generally less than 9.2 mcg/mL (based on a median creatinine concentration of 1.18 g/L).
Thiosulfate (Creatinine corrected)	mg/g Creat	Generally less than 7.8 mg/g creatinine

4885B ZPP (Zinc Protoporphyrin), Blood

Summary of Changes: Scope of Analysis was changed.
ZPP (OSHA Converted Units) was added.
Reference Comment was changed.

Scope of Analysis: H (84202): ZPP, ZPP (OSHA Converted Units)
Method (CPT Code)

Compound Name	Units	Reference Comment
ZPP	mcmol/mol heme	Normal range for Zinc Protoporphyrin (ZPP) is 30 – 80 mcmol/mol heme.
ZPP (OSHA Converted Units)	mcg/dL	This result is converted from mcmol/mol heme assuming a hematocrit of 42% for adults. The conversion factor is mcmol/mol heme x 0.544 = mcg/dL. OSHA occupational threshold is 100 mcg/dL blood.