



Effective Date:  
Monday, March 28, 2011

## New Tests and 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 28, 2011

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**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.

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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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## New Tests and Test Updates

Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
0638B	Beryllium, Blood								•	
0638SP	Beryllium, Serum/Plasma								•	
0638U	Beryllium, Urine								•	
0680B	Bismuth, Blood				•					
0680FL	Bismuth, Fluid				•					
0680R	Bismuth, RBCs				•					
0680SP	Bismuth, Serum/Plasma				•					
0680U	Bismuth, Urine				•					
0711B	Boron, Blood				•					
0711FL	Boron, Fluid				•					
0711LI	Boron, Liquid				•					
0711R	Boron, RBCs				•					
0711SP	Boron, Serum/Plasma				•					
0711U	Boron, Urine				•					
1265B	Chromium and Cobalt, Blood	•								
1261B	Chromium, Blood			•	•				•	
1261SP	Chromium, Serum/Plasma				•					
1290B	Cobalt, Blood								•	
1290SP	Cobalt, Serum/Plasma								•	
6303U	Firefighter Core Baseline Profile, Urine								•	
2156B	Germanium, Blood				•					
2156R	Germanium, RBCs				•					
2243U	Heavy Metals Panel 4, Urine (CSA)				•				•	
2241U	Heavy Metals Panel 5A, Urine (CSA)				•				•	
2242U	Heavy Metals Panel 5B, Urine (CSA)								•	
2551FL	Magnesium - Total, Fluid				•					
2670UH	Mercury, 24 Hour Urine								•	
2670U	Mercury, Urine								•	
2697B	Metals Acute Poisoning Panel, Blood (CSA)			•					•	
2233U	Metals Panel 2, Urine (CSA)				•				•	
2693B	Metals/Metalloids Acute Poisoning Panel, Blood				•					



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## New Tests and Test Updates

Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
2693R	Metals/Metalloids Acute Poisoning Panel, RBCs				•					
2693U	Metals/Metalloids Acute Poisoning Panel, Urine				•				•	
2661U	Metals/Metalloids Panel 1, Urine				•				•	
2663B	Metals/Metalloids Panel 3, Blood			•	•				•	
2663U	Metals/Metalloids Panel 3, Urine				•				•	
2240U	Metals/Metalloids Panel, Urine (CSA)				•				•	
3066B	Mineral Profile, Blood			•	•				•	
3066SP	Mineral Profile, Serum/Plasma				•				•	
6317U	Semi Conductor Panel, Urine				•				•	



Effective Date:  
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# New Tests and Test Updates

## New Tests

<b>1265B</b>	<b>Chromium and Cobalt, Blood</b>	<b>Effective Immediately</b>
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Scope of Analysis: Chromium [ICP/MS], Cobalt [ICP/MS]

Method(s): Inductively Coupled Plasma/Mass Spectrometry (ICP/MS)

Purpose: Exposure Monitoring/Investigation

Category: Metal/Element

Specimen Requirements: 1 mL Blood

Minimum Volume: 0.4 mL

Special Handling: Clotted Blood specimens are not acceptable. To reduce specimen contamination, powder-free gloves are recommended during collection. Blood should be drawn through an indwelling plastic intracath needle into a trace metal free evacuated tube (e.g. B/D Royal blue top Vacutainer®) containing EDTA as a preservative. If using a steel needle, contamination may be reduced by discarding the first tube. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.

Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)

Transport Temperature: Refrigerated

Light Protection: Not Required

Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).

Stability: Room Temperature: 14 day(s)  
Refrigerated: 14 day(s)  
Frozen (-20 °C): 14 day(s)

**Method: Inductively Coupled Plasma/Mass Spectrometry (ICP/MS)**

Set-Up Days / TAT: Monday-Friday 3 days (after set-up)

CPT Code: 82495

Compound Name / Alias	Units	RL	Reference Comment
Chromium	mcg/L	1	Normal blood values are less than 1.0 mcg/L.
Cobalt	mcg/L	1	Normal blood values are less than 1.0 mcg/L.



# New Tests and Test Updates

## Test Changes

### 0638B Beryllium, Blood

Summary of Changes: Reference Comment was changed.

Scope of Analysis: ICP/MS (83018): Beryllium  
Method (CPT Code)

Compound Name	Units	Reference Comment
Beryllium	mcg/L	Reference Range: Less than 0.5 mcg/L.

### 0638SP Beryllium, Serum/Plasma

Summary of Changes: Reference Comment was changed.

Scope of Analysis: ICP/MS (83018): Beryllium  
Method (CPT Code)

Compound Name	Units	Reference Comment
Beryllium	mcg/L	Reference Range: Less than 0.5 mcg/L.

### 0638U Beryllium, Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
Method (CPT Code) ICP/MS (83018): Beryllium, Beryllium (Creatinine corrected)

Compound Name	Units	Reference Comment
Beryllium	mcg/L	Reference Range: Less than 0.5 mcg/L. May be elevated in smokers.

### 0680B Bismuth, Blood

Summary of Changes: Specimen Requirements were changed.

Specimen Requirements: 1 mL Blood  
Transport Temperature: Refrigerated  
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
Light Protection: Not Required  
Special Handling: Clotted Blood specimens are not acceptable.  
Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.  
Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).



## New Tests and Test Updates

### Test Changes

#### 0680FL Bismuth, Fluid

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 2 mL Fluid  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: None  
Rejection Criteria: None

#### 0680R Bismuth, RBCs

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 1 mL RBCs  
Transport Temperature: Refrigerated  
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
Light Protection: Not Required  
Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.  
Rejection Criteria: Received Frozen.

#### 0680SP Bismuth, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 1 mL Serum or Plasma  
Transport Temperature: Refrigerated  
Specimen Container: Plasma: Royal Blue top tube (Trace metal-free; EDTA), Serum: Royal Blue top tube (Trace metal-free; No additive)  
Light Protection: Not Required  
Special Handling: Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines.  
Rejection Criteria: Polymer gel separation tube (SST or PST).

#### 0680U Bismuth, Urine

Summary of Changes: Specimen Requirements were changed.

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## New Tests and Test Updates

### Test Changes

Specimen Requirements: 1 mL Urine  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
Rejection Criteria: None

#### 0711B Boron, Blood

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 1 mL Blood  
Transport Temperature: Refrigerated  
Specimen Container: Royal Blue top tube, plastic (Trace metal-free; EDTA)  
Light Protection: Not Required  
Special Handling: Clotted Blood specimens are not acceptable. Immediately transfer sample to an acid washed plastic screw capped vial. Glass containers are not acceptable. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.  
Rejection Criteria: Glass container. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).

#### 0711FL Boron, Fluid

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 3 mL Fluid  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: None  
Rejection Criteria: Glass container.

#### 0711LI Boron, Liquid

Summary of Changes: Specimen Requirements were changed.

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## New Tests and Test Updates

### Test Changes

Specimen Requirements: 3 mL Liquid  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: None  
Rejection Criteria: Glass container.

#### 0711R Boron, RBCs

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 1 mL RBCs  
Transport Temperature: Refrigerated  
Specimen Container: Royal Blue top tube, plastic (Trace metal-free; EDTA)  
Light Protection: Not Required  
Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.  
Rejection Criteria: Received Frozen. Glass container.

#### 0711SP Boron, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 1 mL Serum or Plasma  
Transport Temperature: Refrigerated  
Specimen Container: Plasma: Royal Blue top tube, plastic (Trace metal-free; EDTA), Serum: Royal Blue top tube, plastic (Trace metal-free; No additive)  
Light Protection: Not Required  
Special Handling: Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines.  
Rejection Criteria: Glass container. Polymer gel separation tube (SST or PST).

#### 0711U Boron, Urine

Summary of Changes: Specimen Requirements were changed.

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# New Tests and Test Updates

## Test Changes

Specimen Requirements: 1 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
 Rejection Criteria: Glass container.

### 1261B Chromium, Blood

Summary of Changes: Specimen Requirements were changed.  
 Reference Comment was changed.  
 Methods/CPT Codes were changed [ICP/MS (82495)]

Specimen Requirements: 1 mL Blood  
 Transport Temperature: Refrigerated  
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
 Light Protection: Not Required  
 Special Handling: Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.  
 Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).  
 Scope of Analysis: ICP/MS (82495): Chromium  
 Method (CPT Code)

Compound Name	Units	Reference Comment
Chromium	mcg/L	Normal blood values are less than 1.0 mcg/L.

### 1261SP Chromium, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.

Specimen Requirements: 1 mL Serum or Plasma  
 Transport Temperature: Refrigerated  
 Specimen Container: Plasma: Royal Blue top tube (Trace metal-free; EDTA), Serum: Royal Blue top tube (Trace metal-free; No additive)  
 Light Protection: Not Required  
 Special Handling: Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines.  
 Rejection Criteria: Polymer gel separation tube (SST or PST).

### 1290B Cobalt, Blood



# New Tests and Test Updates

## Test Changes

Summary of Changes: Reference Comment was changed.

Scope of Analysis: ICP/MS (83018): Cobalt  
Method (CPT Code)

Compound Name	Units	Reference Comment
Cobalt	mcg/L	Normal blood values are less than 1.0 mcg/L.

### 1290SP Cobalt, Serum/Plasma

Summary of Changes: Reference Comment was changed.

Scope of Analysis: ICP/MS (83018): Cobalt  
Method (CPT Code)

Compound Name	Units	Reference Comment
Cobalt	mcg/L	Reference range: Less than 0.5 mcg/L.

### 6303U Firefighter Core Baseline Profile, Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
Method (CPT Code) ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
ICP/MS (83018): Antimony, Antimony (Creatinine corrected)  
ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.

Various states require that levels above certain cutoffs must be reported to the state in which the patient resides.  
Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2156B Germanium, Blood

Summary of Changes: Specimen Requirements were changed.



## New Tests and Test Updates

### Test Changes

Specimen Requirements: 2 mL Blood  
Transport Temperature: Refrigerated  
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
Light Protection: Not Required  
Special Handling: Clotted Blood specimens are not acceptable.  
Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.  
Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).

#### 2156R Germanium, RBCs

Summary of Changes: Specimen Requirements were changed.

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Specimen Requirements: 2 mL RBCs  
Transport Temperature: Refrigerated  
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
Light Protection: Not Required  
Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.  
Rejection Criteria: Received Frozen.

#### 2243U Heavy Metals Panel 4, Urine (CSA)

Summary of Changes: Specimen Requirements were changed.  
Reference Comment was changed.

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Specimen Requirements: 6 mL Urine  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
Rejection Criteria: None  
Scope of Analysis: Colorimetry (82570): Creatinine  
Method (CPT Code) ICP/MS (83018): Bismuth  
ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
ICP/MS (83018): Antimony, Antimony (Creatinine corrected)  
ICP/MS (83825): Mercury, Mercury (Creatinine corrected)



# New Tests and Test Updates

## Test Changes

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.  Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2241U Heavy Metals Panel 5A, Urine (CSA)

Summary of Changes: Specimen Requirements were changed.  
Reference Comment was changed.

- Specimen Requirements: 8 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: None  
 Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (83655): Lead, Lead (Creatinine corrected)  
 ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83018): Strontium, Strontium (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)  
 GFAAS (82495): Chromium, Chromium (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.  Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2242U Heavy Metals Panel 5B, Urine (CSA)

Summary of Changes: Reference Comment was changed.



# New Tests and Test Updates

## Test Changes

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (83018): Bismuth  
 ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (84255): Selenium, Selenium (Creatinine corrected)  
 ICP/MS (83018): Tellurium  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.  Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2551FL Magnesium - Total, Fluid

Summary of Changes: Specimen Requirements were changed.

Specimen Requirements: 2 mL Fluid  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: None  
 Rejection Criteria: None

### 2670UH Mercury, 24 Hour Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: ICP/MS (83825): Urine Volume, Mercury, Mercury  
 Method (CPT Code)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.  Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.
Mercury	mcg/24 hr	[Reference comment removed]

### 2670U Mercury, Urine



# New Tests and Test Updates

## Test Changes

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
Method (CPT Code) ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.
		Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2697B Metals Acute Poisoning Panel, Blood (CSA)

Summary of Changes: Reference Comment was changed.  
Methods/CPT Codes were changed [ICP/MS (82495)]  
Method for Chromium, Cobalt was changed.

Scope of Analysis: ICP/MS (82495): Chromium, Cobalt  
Method (CPT Code) ICP/MS (82300): Cadmium  
ICP/MS (83018): Antimony  
ICP/MS (82175): Arsenic  
ICP/MS (84255): Selenium  
ICP/MS (83018): Molybdenum  
ICP/MS (83018): Bismuth  
ICP/MS (83018): Tellurium  
GFAAS (83018): Vanadium  
ICP/MS (83885): Nickel  
FAAS (84630): Zinc  
FAAS (82525): Copper  
ICP/MS (83825): Mercury  
ICP/MS (83018): Boron

Compound Name	Units	Reference Comment
Chromium	mcg/L	Normal blood values are less than 1.0 mcg/L.
Cobalt	mcg/L	Normal blood values are less than 1.0 mcg/L.

### 2233U Metals Panel 2, Urine (CSA)

Summary of Changes: Specimen Requirements were changed.  
Reference Comment was changed.



# New Tests and Test Updates

## Test Changes

Specimen Requirements: 5 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: None  
 Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.

Various states require that levels above certain cutoffs must be reported to the state in which the patient resides.  
 Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2693B Metals/Metalloids Acute Poisoning Panel, Blood

Summary of Changes: Specimen Requirements were changed.

Specimen Requirements: 6 mL Blood  
 Transport Temperature: Refrigerated  
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
 Light Protection: Not Required  
 Special Handling: Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.  
 Rejection Criteria: Light Green top tube (Lithium Heparin). Glass container. Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).

### 2693R Metals/Metalloids Acute Poisoning Panel, RBCs

Summary of Changes: Specimen Requirements were changed.



# New Tests and Test Updates

## Test Changes

- Specimen Requirements: 7 mL RBCs
- Transport Temperature: Refrigerated
- Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
- Light Protection: Not Required
- Special Handling: Avoid seafood consumption for 48 hours prior to sample collection. Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
- Rejection Criteria: Received Frozen.

### 2693U Metals/Metalloids Acute Poisoning Panel, Urine

Summary of Changes: Specimen Requirements were changed.  
Reference Comment was changed.

- Specimen Requirements: 7 mL Urine
- Transport Temperature: Refrigerated
- Specimen Container: Plastic container (Acid washed or Trace metal-free)
- Light Protection: Not Required
- Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.
- Rejection Criteria: None
- Scope of Analysis: ICP/MS (82175): Arsenic
- Method (CPT Code) ICP/MS (83018): Bismuth
- ICP/MS (83825): Mercury
- ICP/MS (84255): Selenium
- ICP/MS (83018): Thallium
- ICP/MS (83018): Antimony
- ICP/MS (83655): Lead
- ICP/MS (83018): Barium

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.  Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2661U Metals/Metalloids Panel 1, Urine

Summary of Changes: Specimen Requirements were changed.  
Reference Comment was changed.





# New Tests and Test Updates

## Test Changes

Specimen Requirements: 6 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: None  
 Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83655): Lead, Lead (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.  Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2663B Metals/Metalloids Panel 3, Blood

Summary of Changes: Specimen Requirements were changed.  
 Reference Comment was changed.  
 Methods/CPT Codes were changed [ICP/MS (82495)]  
 Method for Chromium was changed.

Specimen Requirements: 6 mL Blood  
 Transport Temperature: Refrigerated  
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
 Light Protection: Yes  
 Special Handling: Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.  
 Rejection Criteria: Not received Light Protected. Light Green top tube (Lithium Heparin). Glass container. Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).



# New Tests and Test Updates

## Test Changes

Scope of Analysis: ICP/MS (82495): Chromium  
 Method (CPT Code) ICP/MS (82300): Cadmium  
 H (84202): ZPP  
 ICP/MS (83655): Lead  
 ICP/MS (82175): Arsenic  
 ICP/MS (83825): Mercury

Compound Name	Units	Reference Comment
Chromium	mcg/L	Normal blood values are less than 1.0 mcg/L.

### 2663U Metals/Metalloids Panel 3, Urine

Summary of Changes: Specimen Requirements were changed.  
 Reference Comment was changed.

Specimen Requirements: 8 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: None  
 Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83655): Lead, Lead (Creatinine corrected)  
 ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)  
 GFAAS (82495): Chromium, Chromium (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.

Various states require that levels above certain cutoffs must be reported to the state in which the patient resides.  
 Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 2240U Metals/Metalloids Panel, Urine (CSA)

Summary of Changes: Specimen Requirements were changed.  
 Reference Comment was changed.



# New Tests and Test Updates

## Test Changes

- Specimen Requirements: 10 mL Urine
- Transport Temperature: Refrigerated
- Specimen Container: Plastic container (Acid washed or Trace metal-free)
- Light Protection: Not Required
- Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.
- Rejection Criteria: None
- Scope of Analysis: Colorimetry (82570): Creatinine
- Method (CPT Code) ICP/MS (83018): Bismuth
- ICP/MS (82175): Arsenic, Total Inorganic, Arsenic, Total Inorganic (Creatinine corrected)
- ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)
- ICP/MS (83018): Beryllium, Beryllium (Creatinine corrected)
- ICP/MS (83825): Mercury, Mercury (Creatinine corrected)
- GFAAS (82495): Chromium, Chromium (Creatinine corrected)

Compound Name	Units	Reference Comment
Beryllium	mcg/L	Reference Range: Less than 0.5 mcg/L. May be elevated in smokers.
Mercury	mcg/L	Normally: Less than 5 mcg/L.  Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

### 3066B Mineral Profile, Blood

- Summary of Changes: Specimen Requirements were changed.
- Reference Comment was changed.
- Methods/CPT Codes were changed [ICP/MS (82495)]
- Method for Chromium, Cobalt was changed.



# New Tests and Test Updates

## Test Changes

Specimen Requirements: 7 mL Blood  
 Transport Temperature: Refrigerated  
 Specimen Container: Green top tube (Sodium Heparin) AND Royal Blue top tube (Trace metal-free; EDTA)  
 Light Protection: Not Required  
 Special Handling: Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.  
 Rejection Criteria: Tan top tube - plastic (K2EDTA). Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; EDTA). Light Blue top tube (Sodium Citrate). Royal Blue top tube (Trace metal-free; Sodium Heparin). Gray top tube (Sodium Fluoride / Potassium Oxalate). Yellow top tube (ACD - Acid Citrate Dextrose). Lavender top tube (EDTA). Green top tube (Sodium Heparin).  
 Scope of Analysis: ICP/MS (82495): Chromium, Cobalt  
 Method (CPT Code) ICP/MS (84255): Selenium  
 ICP/MS (83018): Molybdenum  
 ICP/MS (83785): Manganese  
 FAAS (84630): Zinc  
 FAAS (82525): Copper  
 FAAS (83735): Magnesium

Compound Name	Units	Reference Comment
Chromium	mcg/L	Normal blood values are less than 1.0 mcg/L.
Cobalt	mcg/L	Normal blood values are less than 1.0 mcg/L.

### 3066SP Mineral Profile, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.  
Reference Comment was changed.

Specimen Requirements: 7 mL Serum or Plasma  
 Transport Temperature: Refrigerated  
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)  
 Light Protection: Not Required  
 Special Handling: Hemolyzed Specimens are unsuitable for analysis. Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines.  
 Rejection Criteria: Tan top tube - plastic (K2EDTA). Light Blue top tube (Sodium Citrate). Gray top tube (Sodium Fluoride / Potassium Oxalate). Polymer gel separation tube (SST or PST). Yellow top tube (ACD - Acid Citrate Dextrose). Lavender top tube (EDTA).



# New Tests and Test Updates

## Test Changes

Scope of Analysis: GFAAS (82495): Chromium  
 Method (CPT Code) ICP/MS (84255): Selenium  
 ICP/MS (83018): Molybdenum  
 ICP/MS (83785): Manganese  
 ICP/MS (83018): Cobalt  
 ICP/MS (84630): Zinc  
 FAAS (82525): Copper  
 FAAS (83735): Magnesium

Compound Name	Units	Reference Comment
Cobalt	mcg/L	Reference range: Less than 0.5 mcg/L.

**6317U      Semi Conductor Panel, Urine**

Summary of Changes: Specimen Requirements were changed.  
 Reference Comment was changed.

Specimen Requirements: 7 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: None  
 Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (84255): Selenium, Selenium (Creatinine corrected)  
 ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (83018): Tellurium  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Mercury	mcg/L	Normally: Less than 5 mcg/L.

Various states require that levels above certain cutoffs must be reported to the state in which the patient resides.  
 Please contact NMS Labs if you need assistance in supplying your state with the required information.