OVERVIEW OF METALS – BIOMONITORING CALIFORNIA March 27, 2014 Scientific Guidance Panel Meeting

Metal	Biomonitoring California Status		Current Biomonitoring California Laboratory Capability		CDC's National Biomonitoring Program Status as of April 2014*			Under Consideration by CDC
	Designated	Priority	Urine	Blood	Urine	Blood	Serum	Blood
Antimony (Sb)	✓				✓			
Arsenic (As)	✓	✓	√ď		√ď			
Barium (Ba)	✓				✓			
Beryllium (Be)	✓				Dropped ^f			
Cadmium (Cd)	✓	✓	✓	✓	✓	✓		
Cesium (Cs)	✓				✓			
Chromium (Cr)	^a		✓					Under consideration ^h
Cobalt (Co)	✓		✓		✓			
Copper (Cu)	^b						New	
Lead (Pb)	✓	✓	√e	✓	✓	✓		
Manganese (Mn)	✓		✓	✓	✓			
Mercury (Hg)	✓	✓	✓	✓	✓	√d		
Molybdenum (Mo)	✓		✓		✓			
Nickel (Ni)								Under consideration
Platinum (Pt)	✓				Dropped			
Selenium (Se)	b		✓			New	New	
Strontium (Sr)	b				New ^g			
Thallium (TI)	✓		✓		✓			
Tin (Sn)	b				New			
Tungsten (W)	✓		✓	✓	✓			
Uranium (U)	✓		✓	✓	✓			Under consideration
Vanadium (V)	c							
Zinc (Zn)	^b						New	

^{*}The Centers for Disease Control and Prevention (CDC) anticipates releasing Updated Tables for the National Report on Human Exposure to Environmental Contaminants in April 2014 (Mowbray, pers comm, 2014).

Table Notes:

- a. Under consideration by the Scientific Guidance Panel at March 27, 2014 meeting.
- b. Will be designated after CDC's anticipated April 2014 release of Updated Tables.
- c. Designated as a component of diesel exhaust.
- d. Speciated results also available. Speciation of mercury in blood is a new CDC capability (Mowbray, pers comm, 2014).
- e. Feasible to measure lead in urine but not advised as a biomarker.
- f. Not detected in three or more NHANES survey periods so being dropped by CDC (Mowbray, pers comm, 2014).
- g. Newly added to panel. Results will appear for the first time in CDC's anticipated April 2014 release of Updated Tables (Mowbray, pers comm, 2014).
- h. Under consideration by CDC for possible future inclusion in blood metals panel (Mowbray, pers comm, 2014).

References

Mowbray A (pers comm, 2014). Electronic mail from Amy Mowbray, Centers for Disease Control and Prevention, to Robin Christensen, California Department of Public Health. January 14, 2014.