

National Blood Lead Proficiency Testing Program

January 2009 Testing Event

This nationwide proficiency testing program is supported by Project H 46 MC00123 from the Maternal and Child Health Bureau (Title V, Social Security Act), Health Resources and Services Administration, U.S. Department of Health and Human Services, and administered at the Wisconsin State Laboratory of Hygiene.

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February 19, 2009

Dear Participant:

Your individual performance report and statistical summary for the monthly blood lead proficiency testing event are attached.

Because most participants in this event (594 of 719) participated in the regulatory testing program, the target value and method statistics tables have been calculated using the much larger pool of data. The graphical figures in the report are restricted to those laboratories reporting only the monthly results.

Sample 09PB02 contained a lead concentration falling below the limit of quantification for many laboratories. In this event approximately 82% of the LeadCare II participants reported a result of <3 g/dL, making that the most appropriate target value. Because of system limitations, for evaluation purposes a target value of 2 g/dL has been applied. This value, along with an associated acceptable range of 0-6 g/dL appears on the individual evaluation report for LeadCare II participants. The statistical summary more correctly lists the target value as <3 g/dL for this reporting group.

As always, please contact us with any questions you might have.

Sincerely,

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Target and Acceptable Range Information, mg/dL

Group	09PB01	09PB02	09PB03
Refereed Methods			
Target Value	21	1	15
Accepted Result	17-25	0-5	11-19
LeadCare®			
Target Value	25	1	18
Accepted Result	21-29	0-5	14-22
LeadCare® II			
Target Value	27	<3	20
Accepted Result	23-31	0-6	16-24

Method Statistics

Refereed Group	09PB01	09PB02	09PB03
Referee Laboratories (N=14)			
Mean	20.7	1.2	14.7
Standard Deviation	1.5	0.8	1.0
Number of Results *	14	14	14
All Refereed Methods (N=133)			
Mean*	20.5	1.3	14.7
Standard Deviation*	1.6	0.8	1.7
Participant Results (%Pass)	95	99	97
Anodic Stripping Voltammetry (N=25)			
Mean*	20.0	1.9	13.5
Standard Deviation*	2.2	1.3	1.9
Participant Results (%Pass)	96	100	100
Electrothermal AA (GFAA) (N=91)			
Mean*	20.6	1.2	15.0
Standard Deviation*	1.5	0.8	1.4
Participant Results (%Pass)	98	99	99
ICP-MS (N=17)			
Mean*	21.4	1.9	15.7
Standard Deviation*	3.2	1.2	2.1
Participant Results (%Pass)	88	100	94

* Statistical outliers and alpha-numeric results (e.g. <X) have been excluded from the calculations

† Lack of statistical group consensus; all results deemed acceptable.

LeadCare® Group	09PB01	09PB02	09PB03
LeadCare® (N=231)			
Mean*	25.0	1.3	18.3
Standard Deviation*	2.3	0.9	1.9
Participant Results (%Pass)	89	96	92
LeadCare® II (N=202)			
Mean*	26.7	<3	20.1
Standard Deviation*	2.0	N/A	1.7
Participant Results (%Pass)	92	97	94

* Statistical outliers and alpha-numeric results (e.g. <X) have been excluded from the calculations

† Lack of statistical group consensus; all results deemed acceptable.



