

Current Practices to Identify Childhood Lead Poisoning



Results of a survey of physicians and
mid-level practitioners

Purpose



- ❧ What are the childhood lead testing practices among physicians and mid-level practitioners?
 - ❧ Frequency of testing
 - ❧ Determine barriers to testing
 - ❧ Type of tests performed
 - ❧ Screening for risk
- ❧ Are Early and Periodic Screening, Diagnostic, and Treatment guidelines (EPSDT) being followed?

Purpose



“Medicaid children should be tested for lead poisoning at 12 and 24 months of age. Children up to age 6 who have not been checked for lead poisoning before should also be tested. All children in Medicaid are at risk of lead poisoning. To ensure good health for the child, the federal government requires that all Medicaid children be tested. All Medicaid children at other ages should be screened.”

Methods



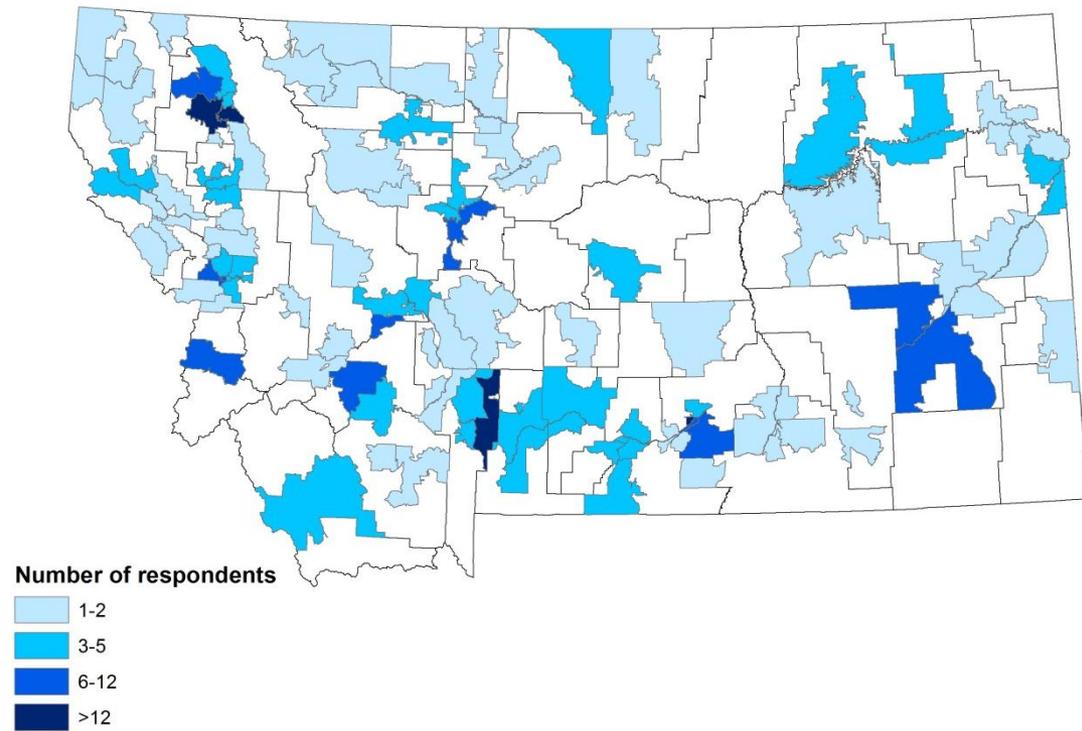
- ❧ Obtained addresses of pediatricians, family medicine physicians, physician assistants and nurse practitioners
- ❧ Sent letter and paper survey
 - ❧ Online option
- ❧ \$5 incentive
- ❧ Postcard reminders
- ❧ Phone call reminder

Results



- ❧ 666 completions
 - ❧ 64% response rate
- ❧ 281 eligible for analysis
- ❧ Large majority done on paper
- ❧ Good coverage

Number of respondents by zip code of medical practice, Lead Testing Survey, 2012



Demographic and practice related characteristics of physicians and mid-level practitioners, Montana, 2012

	% (n)
Number of physicians and mid-level practitioners in your practice	
1	9 (24)
2-5	51 (138)
>5	40 (108)
Ownership/Affiliation of your practice	
Private	35 (93)
Hospital	43 (114)
Community/rural health center, IHS	17 (45)
Other	5 (14)
Number of years in practice	
<10	16 (45)
10-19	43 (118)
>19	41 (113)
Proportion of your patients \leq5 years of age that are enrolled in Medicaid	
<10%	17 (47)
11-50%	47 (128)
>50%	16 (44)
Unknown	19 (52)

Practice-related characteristics of physicians and mid-level practitioners related to lead screening, Montana, 2012

	% (n)
Blood lead testing practices different for privately insured children?	
Yes	8 (23)
No	91 (251)
Factors assessed to determine child's risk for lead poisoning	
Age of child's current home	71 (167)
Zip code of child's current home	7 (16)
Previous addresses where child has lived	17 (41)
Standardized assessment questionnaire	22 (52)
Number children identified in the past 5 years with a lead level ≥ 10 ug/dl	
0	86 (237)
1-2	12 (34)
3-10	2 (5)
>10	0 (0)

Practice-related characteristics of physicians and mid-level practitioners related to lead screening, Montana, 2012

	% (n)
Typical practice for blood lead testing among children enrolled in Medicaid	
One year old children	
Test routinely	18 (48)
Test only if risk factors	61 (163)
Do not test	21 (57)
Two year old children	
Test routinely	8 (21)
Test only if risk factors	70 (185)
Do not test	23 (60)
Three to five year old children not previously tested	
Test routinely	9 (25)
Test only if risk factors	66 (175)
Do not test	25 (65)
Three to five year old children previously tested	
Test routinely	2 (4)
Test only if risk factors	62 (155)
Do not test	37 (93)

Lead testing practices, Montana, 2012

% (n)

When you order blood lead testing, where does it occur?

My office

56 (157)

A lab off site

17 (47)

A lab in the same building as my office

16 (45)

Local health department

3 (8)

No answer

9 (24)

Collect capillary or venous samples in your office

Capillary

35 (55)

Venous

53 (84)

No answer

12 (18)

Lead screening related attitudes and perceived patient barriers among physicians and mid-level practitioners, Montana, 2012

	% (n)
Attitudes	
Lead poisoning is a problem in my practice area (Agree)	7 (19)
Parents of my patients know about the potential harm of lead poisoning (Agree)	40 (108)
I am aware of the Medicaid lead testing requirement for children	41 (110)
During a routine encounter I know whether a patient is enrolled in Medicaid (Agree)	70 (193)
Professional lead abatement in the home is an effective treatment for children with blood lead levels between 10-15 ug/dl (Agree)	32 (85)
Lead abatement is available in my community (Agree)	26 (70)
Perceived barriers to blood lead testing among your patients	
Parental refusal of testing	25 (66)
Inadequate reimbursement for testing	6 (16)
Unavailability of effective treatment	3 (7)
Parental difficulty in accessing laboratory services	6 (15)
Low risk of lead exposure in my area	39 (100)
No barriers to testing	40 (104)

Results



- ❧ Practices with more clinicians were more likely to screen (88% > 5 clinicians, 75% 2-5 clinicians, and 64% 1 clinician).
- ❧ Respondents aware of the Medicaid requirement were more likely to screen (92% vs. 74%).
- ❧ Respondents who knew that the child was enrolled in Medicaid (knew their insurance coverage type) were more likely to screen (84% vs. 70%).
- ❧ Respondents who screened were more likely to indicate that the parents of their patients were aware of lead poisoning (43% vs. 28%).

Conclusions



- ❧ Opportunities for outreach to clinicians
 - ❧ Knowledge of Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) rules
 - ❧ Knowledge of insurance status of patient
 - ❧ Knowledge of capillary testing in office
- ❧ Increase awareness of lead hazards in area
- ❧ Increase knowledge of lead resources in the state

Lead Testing Results



Purpose



- ❧ Test Medicaid eligible children between ages of 1 and 5 years for lead
 - ❧ Target children living in homes built before 1978

Results

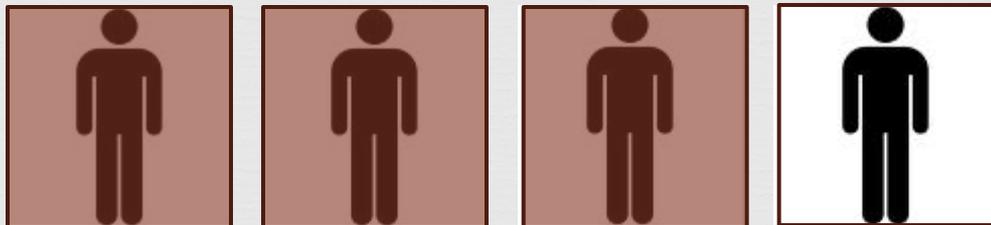


- ❧ 517 valid filter paper tests done as of 8/22/2012
- ❧ 50% female
- ❧ 90% in target age group (1-5 years)

Results



- 109 tests with a lead level of 1-4.9 $\mu\text{g}/\text{dl}$ (21.1%)
- 14 tests with a lead level of $\geq 5 \mu\text{g}/\text{dl}$ (2.7%)
- 123 tests with a detectable lead level (23.8%)



Nearly 1 in 4 children tested had a detectable lead level

Conclusions



- ❧ No level of lead in the blood is considered safe
- ❧ Level of concern based on 97.5 percentile of NHANES data
 - ❧ 2.5% of population has level over 5 $\mu\text{g}/\text{dl}$

Questions?



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