

California Health Benefits Review Program

Analysis of California Assembly Bill 1316 Childhood Lead Poisoning: Prevention

A Report to the 2017-2018 California State Legislature

April 13, 2017



Key Findings:

Analysis of California Assembly Bill 1316 Childhood Lead Poisoning: Prevention

Summary to the 2017-2018 California State Legislature, April 13, 2017



AT A GLANCE

California Assembly Bill (AB) 1316 would amend Section 1367.3 of the Health and Safety Code to specify that group health care service plans shall provide coverage for blood lead tests to measure blood lead levels in all children (rather than only in children deemed “at risk” for lead poisoning). AB 1316 proposes changing the standard of care to indicate that all children, not just those deemed to be at risk, should receive a blood lead test unless a parent/guardian refuses. The bill would also require medically necessary follow-up services and appropriate case management if lead poisoning is identified.

1. CHBRP estimates that, in 2018, of the 24.0 million Californians enrolled in state-regulated health insurance, 13.2 million will have insurance subject to AB 1316.
2. **Benefit coverage.** At baseline, CHBRP estimates that 100% of enrollees impacted by this bill have coverage for blood lead tests, but in private plans subject to the bill, they are only routinely provided when a child is deemed at risk. AB 1316 would not appear to exceed the essential health benefits.
3. **Utilization.** In the first year of implementation, CHBRP estimates that for enrollees aged 0 to 72 months in DMHC- and CDI-regulated plans, there is an increase of 252,754 blood lead level tests, which is a utilization increase of 15.6 tests per 1,000, or a 273% utilization increase. Broken down by age group, this increase is comprised of:
 - a. **0–24 months:** additional 249,853 enrollees in DMHC- and CDI-regulated plans tested for blood lead levels, an increase of 393%
 - b. **24–72 months:** additional 2,901 blood level tests, an increase of 10%.
4. **Expenditures.** Total net expenditures are estimated to increase by \$6,221,000 or 0.004% for the year following implementation of the mandate.
5. **Medical effectiveness.** CHBRP concludes that there is insufficient evidence that a universal screening approach for childhood lead exposure is more effective than a targeted approach of screening high-risk children. CHBRP notes that the absence of evidence does not mean there is no effect; it means that the effect is unknown.
6. **Public health.** In the first year, CHBRP estimates that an additional 4,777 California children may be accurately detected with blood lead levels (BLLs) ≥ 4.5 $\mu\text{g}/\text{dL}$ due to increased testing, 13.8% of whom may have BLLs ≥ 9.5 $\mu\text{g}/\text{dL}$.
7. **Long-term impacts.** It stands to reason that changes in childhood lead exposure detection due to AB 1316 could mediate socioeconomic determinants of health at a population level by increasing surveillance and subsequently prevention and large-scale abatement interventions in a more comprehensive population of California children.

CONTEXT

Events on a national scale related to lead exposure have brought increased attention to lead exposure and lead poisoning. Lead exposure and poisoning are associated with cognitive and other health harms that appear to be irreversible.¹ According to the California Department of Public Health (CDPH), common sources of lead include:

- Lead-based paint (pre-1978) in homes and on furniture, including paint chips;
- Lead contaminated soil;
- Dust contaminated with lead from paint or soil;
- Imported cosmetics and metal jewelry;
- Imported pottery and dishware with leaded glaze;
- Some imported foods.

Lead can also be found in water due to lead piping, soldering and industrial lead contamination and in soil. Over the last several years, the Centers for Disease Control and Prevention (CDC) has altered its guidelines related to lead exposure, recognizing that there is no “safe” level of exposure. In 2012, the CDC released a report called “Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention.” The CDC made this recommendation based on the growing body of evidence that lead exposure resulting in low blood lead levels can have lifelong health impacts. The report recommended a renewed focus on primary prevention for lead exposure and the CDC asserts that a lower blood lead level threshold could lead to the identification of more children with lead exposure, allowing parents, health care providers and public health professionals to address a child’s lead exposure and address community-level exposures to lead.

BILL SUMMARY

Existing code (Section 1367.3 of the Health and Safety Code) requires that every group health care service plan that covers hospital, medical, or surgical expenses offer benefits for the comprehensive preventive care of children. Assembly Bill 1316 would amend Section 1367.3 to specify that group health care service plans shall

¹ Refer to CHBRP’s full report for full citations and references.

provide coverage for blood lead tests to measure blood lead levels in all children (rather than only in children deemed “at risk” for lead poisoning as current code states). It would also require appropriate case managing if lead poisoning is identified.

Current code states that preventive care for children shall be consistent with the Recommendations for Preventive Pediatric Health Care, as adopted by the American Academy of Pediatrics. Current code also states that the CDPH shall adopt regulations establishing a standard of care for lead screening, at least as stringent as the most recent United States Centers for Disease Control and Prevention (CDC) screening guidelines, whereby all children shall be evaluated for risk of lead poisoning by health care providers during each child’s periodic health assessment. Existing guidelines, such as the Early Periodic Screening Diagnostic and Treatment (EPSDT) guidelines, and the American Academy of Pediatrics guidelines, focus lead-related periodicity schedules on children ages 6 months to 72 months (6 years).

AB 1316 proposes changing the standard of care to indicate that all children should receive a blood lead test unless a parent or guardian refuses. Blood lead tests shall be administered in accordance with the periodicity schedule from the Recommendations for Preventive Pediatric Health Care, as adopted by the American Academy of Pediatrics or the CDC guidelines. AB 1316 does not allow for the Childhood Lead Poisoning Prevention Fund to fund these tests. Based on the bill language, it is unclear what, if any, mechanism for enforcement exists for this standard of care.

AB 1316 would also require that if a child with lead poisoning is identified, the CDPH “shall ensure appropriate case management.”² CHBRP considered this to be under the purview of CDPH, rather than health plans and health insurers. Therefore, CHBRP does not project anticipated costs for case management following identification of a child with lead poisoning in this report.

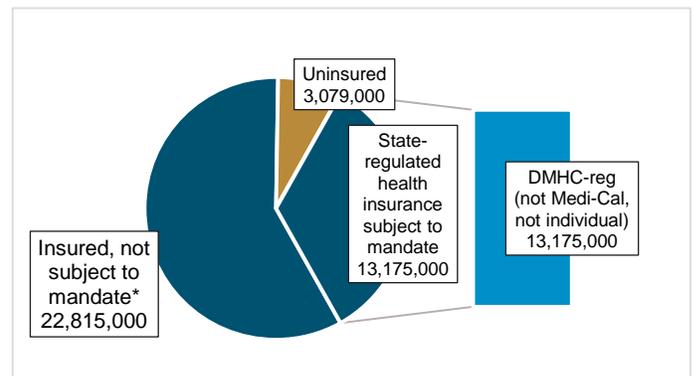
² AB 1316 defines “appropriate case management” as health care referrals, environmental assessments, and educational activities, performed by the appropriate person, professional, or entity, necessary to reduce a child’s exposure to lead and the consequences of the exposure, as determined by the United States Centers for Disease Control, Control and Prevention, or as determined by the department pursuant to Section 105300.

IMPACTS

Benefit Coverage, Utilization and Cost

As written, AB 1316 only affects DMHC-regulated group plans. However, CHBRP assumes AB 1316 would similarly affect individual DMHC-regulated plans and all CDI-regulated policies because providers who administer the blood lead test would do so for all children under their care as they would not be able to discern the regulating body of the commercial carriers for each of their patients. For an overview of which insurance plans and policies are subject to AB 1316, see Figure 1.

Figure 1. Health Insurance in CA and AB 1316



*Such as enrollees in Medicare or self-insured products.
Source: California Health Benefit Review Program, 2017

Benefit Coverage

Currently, 100% of enrollees with DMHC-regulated group health insurance subject to AB 1316 have coverage for blood lead testing, as do 100% of enrollees with individual coverage and CDI-regulated group coverage who are not subject to the mandate. However, commercial plan enrollees currently receive blood lead testing only after a risk assessment (e.g., questionnaire) has been conducted and a child is deemed at-risk for lead exposure. Thus, CHBRP assumes 0% of commercial enrollees are tested for blood lead without a prior risk assessment.

Current coverage of blood lead testing was determined by a survey of the largest (by enrollment) providers of health insurance in California. Postmandate, 100% of enrollees with private health insurance will continue to have coverage for blood lead testing, but the standard of care will shift to testing all children for lead exposure without a prior risk assessment.

Utilization

Postmandate, CHBRP assumes utilization of blood lead tests would increase per AB 1316’s mandate that all children be tested for lead at the 12- and 24-month preventive visit.

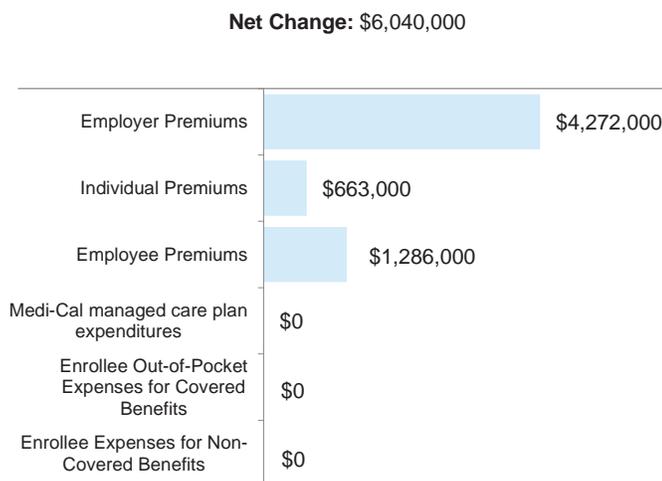
Based on the literature for compliance with blood lead testing, CHBRP assumes postmandate compliance would be 80%. CHBRP assumes this postmandate utilization increase represents a steady state scenario where providers will modify clinical practice in the first year postmandate and will continue this practice in subsequent years. This postmandate utilization increase will result in an additional 252,754 enrollees (aged 0 to 72 months) tested for blood lead: an increase of 273% (see Table 1).

Consistent with the rate of retesting observed in the MarketScan® database as well as CDPH data, CHBRP assumed that of the additional postmandate lead tests, 1.8% would lead to a retest.

Expenditures

AB 1316 would increase total net annual expenditures by \$6,221,000 or 0.0043% for enrollees with DMHC-regulated plans and CDI-regulated policies. This comes from the increase in premiums paid by payers for increased utilization of lead testing, which is already a covered benefit at the preventive visit.

Figure 2. Expenditure Impacts of AB 1316, Postmandate, by Category



Source: California Health Benefits Review Program, 2017.

Medi-Cal

In California, all children in publicly supported programs (such as Medi-Cal and WIC) are covered for blood lead level testing. Children are tested at both 12 and 24 months. Children who were not tested at those scheduled ages in publicly supported programs are covered for testing between 24 to 72 months. Therefore, there would be no measurable impact projected on the Medi-Cal population.

CalPERS

CHBRP estimates that total employer premium expenditures for CalPERS HMOs are estimated to increase by \$291,000, or 0.0060%. Of the amount CalPERS would pay in additional total premium, about \$165,000 would be the cost borne by the General Fund for CalPERS HMO members who are state employees or their dependents.³

Number of Uninsured in California

This bill would have no measureable projected impact on the number of uninsured in the state.

Medical Effectiveness

CHBRP concludes that there is insufficient evidence that a universal screening approach for childhood lead exposure is more effective than a targeted approach of screening high-risk children. CHBRP notes that the absence of evidence does not mean there is no effect; it means that the effect is unknown.

Public Health

In the first year postmandate, CHBRP estimates that an additional 4,777 California children may be accurately detected with blood lead levels (BLLs) ≥ 4.5 $\mu\text{g}/\text{dL}$ due to increased testing, 13.8% of whom may have BLLs ≥ 9.5 $\mu\text{g}/\text{dL}$. This increased surveillance may lead to the discovery of new “hot spots” of lead exposure risk around the state, with the potential for longer term abatement activities to prevent further exposure. This impact would

³ It should be noted, however, that should CalPERS choose to make similar adjustments for consistency to the benefit coverage of enrollees associated with CalPERS’ self-insured products, the fiscal impact on CalPERS could be greater.

extend past the first year of implementation. CHBRP estimates no further public health impact in the first 12 months due to clear and convincing evidence that the majority of counseling and education interventions to reduce child blood lead levels are ineffective and the minimal proportion of cases which would have BLLs high enough to receive chelation therapy.

Long-term Impacts

It is likely there will continue to be a steady state of enrollees receiving blood lead tests after the first year of implementation as blood lead testing for 12- and 24-month-old children is conducted. As with utilization impacts, it is not likely that expenditures will change if a steady state of testing is assumed.

The long-term public health impacts will include increased childhood lead exposure surveillance and potentially the identification of previously unknown areas where lead exposure is a problem, which could lead to public health environmental abatement efforts and reduced prevalence of elevated childhood lead exposures. Environmental interventions undertaken by public health agencies or at the policy level to remove lead paint from homes or to reduce lead in soil have been found to be effective in lowering blood lead levels within affected communities.

Essential Health Benefits and the Affordable Care Act

AB 1316 would not require coverage for a new state benefit. Preventive care, screening, and immunizations are a covered benefit in California's benchmark plan, Kaiser Foundation Health Plan Small Group HMO 30. AB 1316 appears not to exceed the definition of EHBs in California.