INTRODUCTION

For most children in the United States lead-based paint is the most concentrated source of lead. Since there is no safe blood lead level (BLL) identified, small amounts of lead can adversely affect children’s growth and development. Lead paint was banned in 1978. To protect children and families, the Environmental Protection Agency (EPA) requires that renovators performing projects in homes, child care facilities and preschools built before 1978 are trained by the EPA to follow lead-safe work practices. This requirement is known as the Lead Renovation, Repair, and Painting (RRP) Rule. In July 2014, Yellowstone City-County Health Department also known as RiverStone Health (RSH), with technical assistance from a Centers for Disease Control and Prevention (CDC) public health associate, began to investigate how the EPA’s RRP rule is promoted and enforced in Yellowstone County, Montana. The questions RSH hoped to answer from the informal inquiry included: Are contractors compliant? Are hardware stores providing any lead-safe renovation information? Do contractors face any barriers? Where were the pre-1978 structures built? Is childhood lead poisoning in Yellowstone County a concern? Do contractors perceive lead poisoning to be a concern?

METHODS

Region 8 EPA office provided contact information for 121 RRP-certified contractors. RSH reached contractors by phone and mail during February and March in 2015, and asked a series of questions consisting of multiple choice and open-ended questions. In addition to contacting contractors, twenty-one hardware stores were visited in person and asked whether they provide lead-safe educational materials.
RESULTS

Thirty-eight RRP certified contractors agreed to provide feedback regarding their work with lead-safe renovations. Fifty-one percent said childhood lead poisoning was not a concern and 65% said barriers existed for lead safe practices. The top three suggestions from contractors for additional support for lead-safe practices were more accessible training opportunities, increased local enforcement of the rule, and an opt-out clause or elimination of the rule. Maps of pre-1978 housing revealed the highest concentrations in the South Side, downtown, and North Park neighborhoods of Billings. Sixty-eight percent of housing in Billings was built before 1978. Staff found that only two hardware stores out of twenty-one provided education about lead-safe renovation. The Montana Department of Health and Human Services provided a report for lead poisoning cases in 2014. The report showed that RSH received 57 reports for children ≤13 years old in Yellowstone County in 2014 and 7% had a BLL ≥5µg/dL.

Figure 2: Pre-1978 housing in Billings, Montana.
DISCUSSION

- The majority of interviewed contractors stated they face barriers when performing lead-safe renovations. The four main barriers were resistance from landlords and homeowners, the cost of equipment used for lead safe practices, the extra time lead-safe precautions take, and the lack of RRP enforcement by local and federal officials. Currently, 14% of certified contractors do not plan to become recertified under RRP.

- Contractors indicated that offering trainings located in Billings or via DVD/computer-based refresher courses would increase compliance and encourage recertification. Contractors also identified local enforcement of the RRP rule as a supportive measure. Support for enforcement means RRP-certified contractors might not be as likely to lose work to non-certified contractors.

- The housing maps created show the oldest homes are located in the South Side, downtown, and North Park neighborhoods of Billings. Therefore, targeted promotion of the RRP rule and education in the importance of hiring a lead-safe certified contractor should be focused in these areas. Providing lead-safe educational materials (see Figures 3 & 4) to the 19 hardware stores without such materials offers an opportunity to reach homeowners and contractors.

- More than half of the contractors stated they did not think childhood lead poisoning is a concern in Yellowstone County. Based on the reports received by RSH in 2014, 7% of children less than 13 years who were tested for lead had a blood lead level of 5 micrograms per deciliter or higher. Nationally, 2.5% of children ages 1-5 have BLLs ≥ 5µg/dL. The sample size for 2014 was relatively small, indicating the need for increased screening in Yellowstone County to determine the extent of lead poisoning.

Figures 3 & 4: The cover of RiverStone’s lead-safe educational brochure created for hardware stores, and EPA’s “Look for the Logo” Poster.
CONCLUSION

• On average, 10% of children receiving Medicaid in Yellowstone County are screened for lead poisoning. Local goals for increased screening rates should be set to align with Montana’s State Health Improvement Plan to screen 90% of Medicaid children by 2018.

• In order to protect the public from lead-based paint hazards, local enforcement and promotion of the RRP rule is necessary to encourage contractors to use lead-safe work practices and decrease the number of contractors who do not plan to renew their RRP certification.

• Local community health and housing agencies should work closely with the regional EPA offices to explore creative and innovative trainings for contractors who live and work long distances from available RRP trainings.

REFERENCES


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