



State of Connecticut
Department of Public Health
Environmental Health Section
Lead & Healthy Homes Program



LEAD-BASED PAINT IN SCHOOLS: MAINTENANCE & RENOVATION WORK

Was Your School Building Built Before 1978? If So....

Schools constructed before 1978 may contain toxic levels of lead-based paint. Routine maintenance activities and renovation projects that disturb painted surfaces can generate lead-based paint debris and lead dust which, when ingested or inhaled, can result in lead poisoning of children and workers. To minimize the potential of lead poisoning to children and maintenance workers, the State of Connecticut Department of Public Health Lead and Healthy Homes Program recommends that you review the following and take appropriate safety precautions before you conduct any maintenance activities or perform renovation on painted surfaces at your school or child daycare facility.

Why School Officials Must Follow Lead-Safe Work Practices At Their School....

- **Lead-based paint**

Lead-based paint, which was banned from use in schools in 1978, is considered safe as long as it remains intact. However, if the paint cracks, chips, or flakes, or is disturbed during routine maintenance or renovation activities, the resulting paint chips, dust, or vapors can be inhaled or ingested. This causes a health hazard to both children and adults. Lead-based paint may be present on any interior or exterior painted surface including playground equipment.

When children are exposed to lead hazards their brain and nervous system can be negatively affected. They may suffer hearing and visual impairments, slowed growth, and headaches. They may also develop behavior and learning problems such as a shortened attention span, languages or speech deficits, poor performance on math and reading tests, or developmental delays that require special education services. Childrens' blood lead levels greater than or equal to 10 micrograms of lead per deciliter of blood ($\geq 10 \mu\text{g/dL}$) have been associated with lowered IQ, lower class standing in high school, increased absenteeism, lower vocabulary and grammatical-reasoning scores, and poor hand-eye coordination (² Korfmacher 2003). Children with high blood lead levels are more likely to develop reading disabilities, attention deficit hyperactivity disorder, and behavioral problems (³ Needleman 2004, ¹ Brown 2002). It is estimated that approximately twenty percent of children with blood lead levels $\geq 20 \mu\text{g/dL}$ require an average of three years of special education (⁴ Schwartz 1994). The 2011 Miranda study, which measured the impact of early childhood lead exposure on educational test performance among Connecticut school children, concluded that higher blood lead levels in early childhood result in higher failure rates on both the Connecticut Mastery Test (CMT) mathematics and reading scores. Blood lead levels as low as 3-4





µg/dL are negatively associated with (CMT) reading scores and blood lead levels as low as 4-5 µg/dL are negatively associated with CMT mathematics scores. A total of 98,009 unique children with both blood lead and CMT results were included in this research study.



Children who have been exposed to lead also have an increased risk of aggressive behavior, greater delinquency and higher school dropout rates. Some studies indicate that up to ten percent of juvenile delinquency could be attributed to lead exposure (² Korfmacher 2003).



Lead exposure in adults can cause reproductive and digestive problems, high blood pressure, nerve disorders, memory and concentration problems, and muscle and joint pain.



- **EPA's Lead: Renovation, Repair and Painting (RRP) Program**



In 2010, the EPA issued a new rule aimed at protecting children from lead-based paint hazards in places they frequent. This rule, the EPA Lead RRP Program, applies to renovators and maintenance professionals that work in housing, child-care facilities and schools built prior to 1978. The program affects those individuals that conduct renovation, remodeling, or paint removal activities at these facilities. The RRP Program includes pre-renovation education and disclosure as well as training, certification, and work practice requirements. Employees that conduct these activities must be trained as certified renovators and the facility must be EPA certified.



Further information on RRP trainers, courses and documents may be accessed through the following link: www.epa.gov/lead/pubs/renovation.htm



The Connecticut DPH is available to offer compliance assistance and an overview of the RRP requirements to regulated entities and interested groups.



- **RRP Information for Families of Children under Age 6 in Child Care Facilities and Schools.**



School and child care facilities administrators must make parents or guardians of children in a child daycare facility or grade school aware of this rule when a renovation job is performed. Facility officials (or the EPA certified contractor) must make renovation information available to the parents or guardians of children under age six that attend the child daycare facility or school and provide parents or guardians a copy of EPA's *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools* lead hazard information pamphlet.



What Does the CT DPH Recommend to Protect the Safety of Children and Staff During Maintenance or Renovation Work on Painted Surfaces?

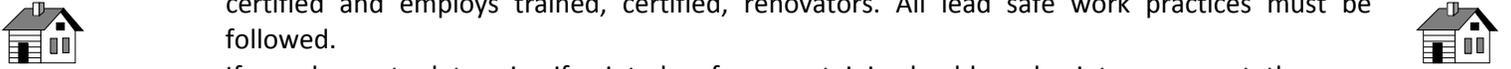


- Staff involved in renovation, repainting or maintenance projects that will disturb paint must take the one day EPA "certified renovator" course given by an EPA approved training provider and comply with all the work practice requirements of RRP.
- If you assume that lead-based paint is present then you must ensure that your staff is trained and certified and provide them with the support, tools, and equipment they need to work in a lead-safe manner.





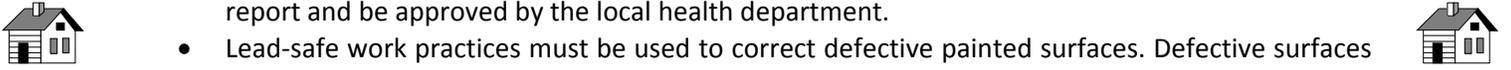
- If you sub-contract maintenance or renovation work, then you must ensure that the firm is EPA certified and employs trained, certified, renovators. All lead safe work practices must be followed.



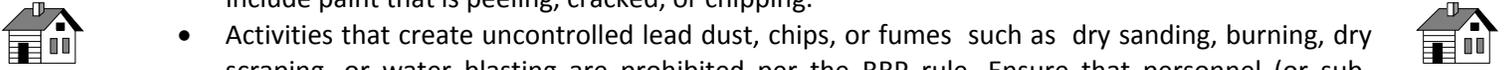
- If you choose to determine if painted surfaces containing lead-based paint are present, then you must use a CT licensed lead consultant contractor that employs CT certified lead inspectors for lead inspection and testing. A lead management plan must accompany the lead inspection report and be approved by the local health department.



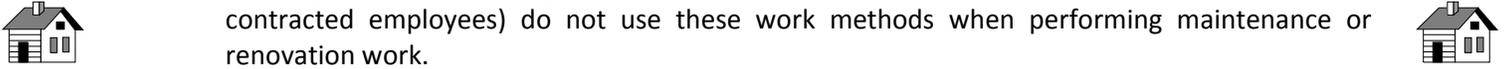
- Lead-safe work practices must be used to correct defective painted surfaces. Defective surfaces include paint that is peeling, cracked, or chipping.



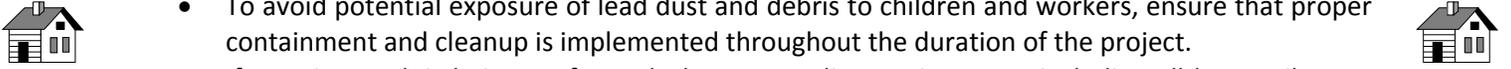
- Activities that create uncontrolled lead dust, chips, or fumes such as dry sanding, burning, dry scraping, or water blasting are prohibited per the RRP rule. Ensure that personnel (or sub-contracted employees) do not use these work methods when performing maintenance or renovation work.



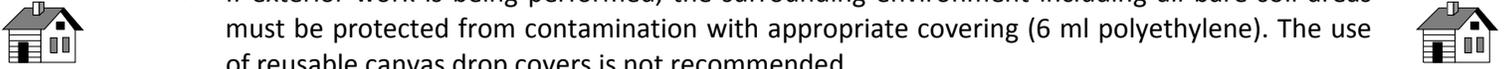
- To avoid potential exposure of lead dust and debris to children and workers, ensure that proper containment and cleanup is implemented throughout the duration of the project.



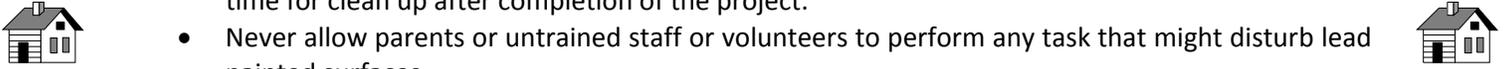
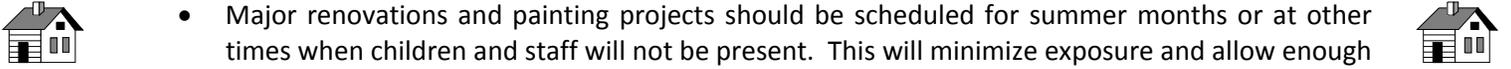
- If exterior work is being performed, the surrounding environment including all bare soil areas must be protected from contamination with appropriate covering (6 ml polyethylene). The use of reusable canvas drop covers is not recommended.



- Major renovations and painting projects should be scheduled for summer months or at other times when children and staff will not be present. This will minimize exposure and allow enough time for clean up after completion of the project.



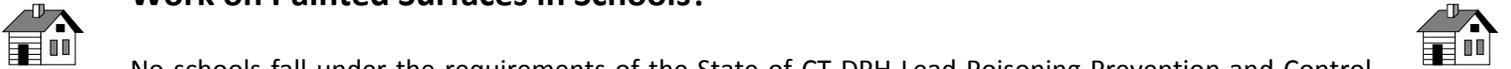
- Never allow parents or untrained staff or volunteers to perform any task that might disturb lead painted surfaces.



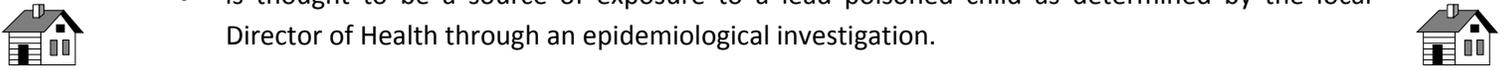
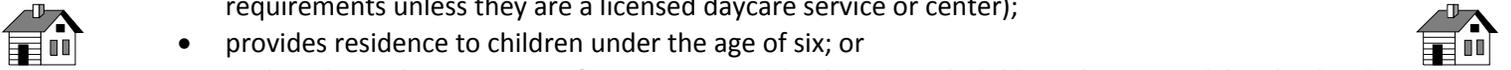
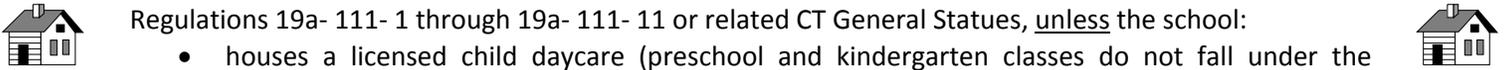
Does the State of CT Department of Public Health Require the Use of Licensed/Certified Lead Abatement Workers for Maintenance or Renovation Work on Painted Surfaces in Schools?



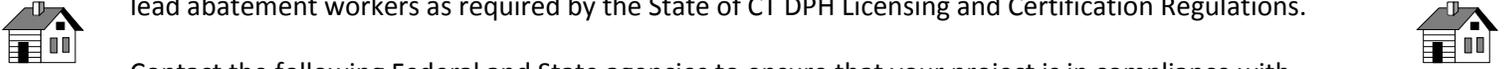
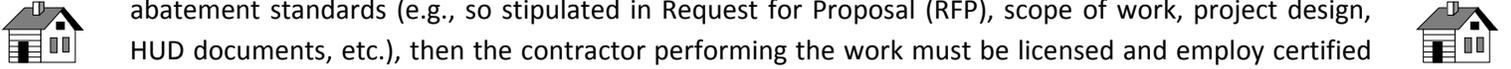
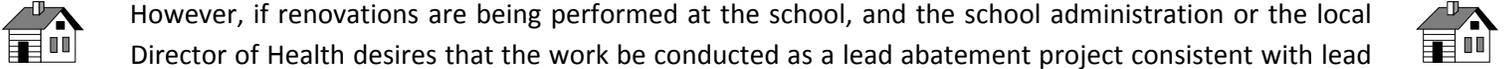
No schools fall under the requirements of the State of CT DPH Lead Poisoning Prevention and Control Regulations 19a- 111- 1 through 19a- 111- 11 or related CT General Statutes, unless the school:



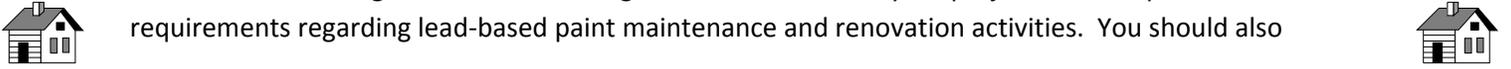
- houses a licensed child daycare (preschool and kindergarten classes do not fall under the requirements unless they are a licensed daycare service or center);
- provides residence to children under the age of six; or
- is thought to be a source of exposure to a lead poisoned child as determined by the local Director of Health through an epidemiological investigation.



However, if renovations are being performed at the school, and the school administration or the local Director of Health desires that the work be conducted as a lead abatement project consistent with lead abatement standards (e.g., so stipulated in Request for Proposal (RFP), scope of work, project design, HUD documents, etc.), then the contractor performing the work must be licensed and employ certified lead abatement workers as required by the State of CT DPH Licensing and Certification Regulations.



Contact the following Federal and State agencies to ensure that your project is in compliance with requirements regarding lead-based paint maintenance and renovation activities. You should also





consult with your local building, housing, and health departments regarding local ordinances that may prohibit certain paint removal activities in your area.



- State of CT Department of Environmental Protection: (860) 424-3023
- United States Environmental Protection Agency: (888) 372-7341
- State of CT Occupational Safety and Health Administration: (860) 263-6900
- United States Occupational Safety and Health Administration: (860) 240-3152



*To Learn About Lead-Safe Work Practices and the new RRP Rule, Please visit Our Website:



www.ct.gov/dph/lead



For further information, you may contact our Department at:



410 Capital Avenue, MS# 51 LED



PO Box 340308



Hartford, CT 06143-0308



Telephone: (860) 509-7299/ Facsimile: (860) 509-7295



Reference:



1. Brown, MJ. (2002). Cost and Benefits of Enforcing Housing policies to Prevent Childhood Lead Poisoning. *Medical Decision Making*. 22 (6): 482-92
2. Korfmacher KS (2003). Long-term costs of lead poisoning: how much can New York save by stopping lead? http://www.afhh.org/aa/aa_state%20local_lead-costs-NYrep.pdf
3. Needleman. HL (2004). Lead Poisoning, *Annual Review of Medicine* 55: 209-22
4. Schwartz. J (1994). Societal Benefits of Reducing Lead Exposure. *Environmental Research* 66: 105- 124.

