## Lead Hazard and Mitigation

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The mission statement for the Wilkes-Barre City Health Department is to prevent disease and to promote and protect the health of Wilkes-Barre residents.

With National Lead Prevention Week being observed last week I want to focus on the most preventable environmental disease of young children .....Lead Poisoning. Approximately half a million children between the ages of 1 and 5 in the United States have blood lead levels above the blood level value at which CDC recommends public health action be initiated. The health department wants to prevent lead exposure to children before they are harmed. Our actions are necessary because exposure to lead can seriously harm a child's health. Lead poisoning causes damage to the brain and nervous system, slows growth and development resulting in learning and behavior problems and hearing and speech problems.

Children under the age of 6 years old are at risk because they are growing so rapidly and because they tend to put their hands or other objects, which may be contaminated with lead dust into their mouths. Children living below the poverty line in older housing are at greatest risk. Many older houses and apartments built before 1978 contain lead based paint.

We now know 2 risk factors for childhood lead poisoning. Housing built before 1978 and children living below the poverty line. Let's take a closer look at the city of Wilkes-Barre. The first risk factor will focus on housing built before 1978. According to a 5 year community survey that was completed in 2014 Wilkes-Barre had 19,058 housing units. Of the 19,058 housing units in the city, 12,200 were built before 1978. That means 64% of all housing units were built before 1978. Regarding the second risk factor of poverty in Wilkes-Barre, a look at the statistics from the U.S. Census Bureau from 2015 shows 32.5% of all residents have income below the poverty level. That is nearly twice the number of Pennsylvanians who have income below the poverty level. Both poverty levels and older housing in Wilkes-Barre has created a perfect storm for childhood lead poisoning.

The next question is what can and will the Wilkes-Barre Health Department do to prevent childhood lead poisoning. Prior to 17 months ago, the health department would be notified through an electronic reporting system called PA-NEDSS. When a laboratory, hospital or doctor's office receives results of an elevated blood level it is immediately sent electronically to the nurses in the health department. If the child was under 6 the nurse would go to the residence and do an assessment of the housing unit. She would then make recommendations to the tenants and/or landlord; however there were no ordinances to support enforcement and the cost for mitigation was very costly, therefore the risk factors remained in the living unit. Follow-up laboratory results were studied and if blood levels remained elevated it would be suggested the family should relocate.

In May of 2016 the city of Wilkes-Barre became proactive in the fight against childhood lead poisoning. The health department and its team of inspectors assumed the responsibilities for inspecting all rental units in the city. Insuring safe housing for the residents was the major concern and all inspectors were also trained in what to look for as factors contributing to childhood lead poisoning. Prior to the health

department doing the rental inspections approximately 300 units were inspected each year. Since the health department became the lead agency over 2,000 inspections will be conducted this year.

In addition to receiving electronic notifications via PA-NEDSS and doing rental inspections, another component was added to reduce childhood lead poisoning. In early September of this year, the Wilkes-Barre City Health Department was awarded a 2 year Lead Hazard Control Grant from HUD through the Pennsylvania Department of Health. The most important aspect of this grant is that there is now funding for abatement of lead hazards in housing units. When there is a child under 6 with an elevated blood level the city now has funding available for mitigation of the lead hazard. Additionally, we were able to hire a lead paint risk assessor who with the necessary equipment can do on site analysis of lead paint.

Through the Lead Hazard Control Grant we are required to provide abatement of risk factors for 19 units. Although it may not seem like a lot, if we can prevent childhood lead poisoning in the children in these units we will have accomplished our goal of creating a healthier Wilkes-Barre. It will take much more work and many more resources for public health to continue its fight to prevent childhood lead poisoning.