



**Public Health**  
Prevent. Promote. Protect.  
**Sullivan County**  
**Public Health Services**



**Sullivan County Public Health Services**  
**Lead Poisoning Prevention Program**



Lead Free  
**KIDS**  
for a Healthy Future

October 20-26, 2019  
**National  
Lead  
Poisoning  
Prevention  
Week 2019**

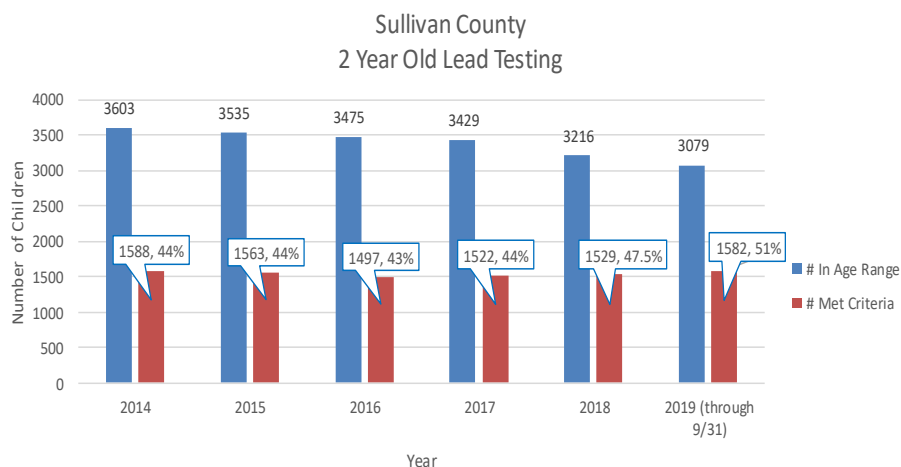
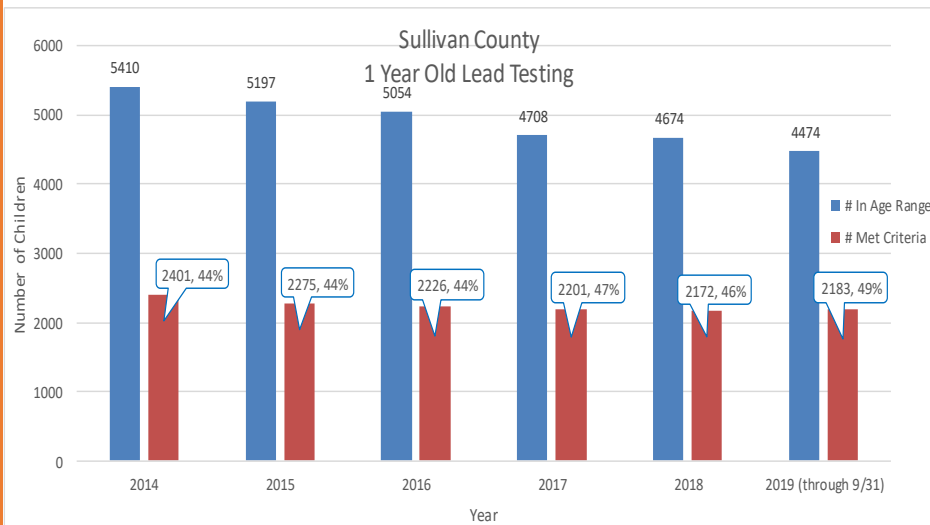
- Get the Facts
- Get Your Home Tested
- Get Your Child Tested

#NLPPW2019 #LeadFreeKids

EPA  
U.S. DEPARTMENT OF JUSTICE  
U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES  
CDC

## Phase I Rulemaking – Amendments to Part 67

- Published on May 1, 2019
- Amends 67-1.1
  - Revised definition of “Elevated blood lead level” to mean a blood lead concentration equal to or greater than 5 µg/dL
- Amends 67-1.2
  - Revised provision requires primary health care providers perform risk reduction and nutrition counseling, and obtain a confirmatory sample (venous blood sample) for children with a blood lead level equal to or greater than 5 µg/dL (*currently*  $\geq 10$  µg/dL)
  - For children with a *confirmed* blood lead level equal to or greater than 5 µg/dL, revised provision requires primary health care providers to perform a complete diagnostic evaluation; medical treatment, if necessary; and referral to the local or State health agency for environmental management (*currently*  $\geq 15$  µg/dL)



## Local Health Department (and District Office) Care Coordination and Environmental Management

Follow-up services for children with elevated blood lead levels includes:

- Care Coordination
- Environmental Management (Note: for partial service counties, these services are provided by environmental health staff at the District Offices (DOs))

Care coordination is typically facilitated by Public Health Nurses or Public Health Educators and involves:

- Data management and case tracking in LeadWeb;
- Ensure appropriate follow-up is completed by health care providers;
- Outreach and education to health care providers and parents/guardians; and,
- Referrals for environmental management.

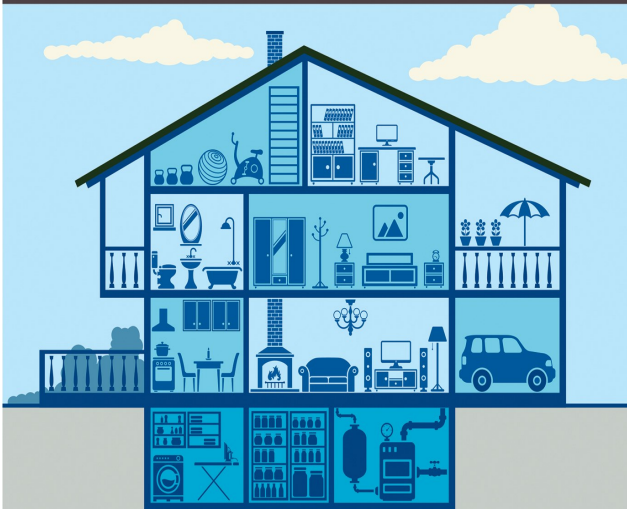
Environmental management is typically facilitated by Sanitarians and involves:

- Environmental inspections and sample collection;
- Outreach and education to parents/guardians;
- Action plans for remediation;
- Enforcement; and,
- Case closure following remediation.



# Childhood Lead Exposure

Amid growing evidence that even low levels of lead exposure can cause long-term damage to children's development, the American Academy of Pediatrics urges stronger federal action to eliminate exposure.



## Common sources of lead in the home:

- Dust
- Soil
- Water in lead pipes
- Toys
- Nutritional supplements
- Dishware
- Fishing sinkers
- Bullets
- Residue from parent occupations
- Paint/hobby materials

**37 million**

Estimated number of housing units in United States that contain lead-based paint

U.S. housing built from 1940-1959: **39 percent**



U.S. housing built from 1960-1977: **11 percent**

U.S. housing built from 1978-1998: **3 percent**

**None**

Level of lead exposure considered safe for children

**\$50 billion**

Annual cost of childhood lead exposure in the United States

**\$17 to \$221**

Money saved for every \$1 invested to reduce lead hazards in U.S. housing

**535,000**

Estimated number of U.S. preschool children with blood lead levels high enough to call for medical management (more than 5 ug/dl)

**23 million**

Estimated total loss of IQ points among U.S. children today from lead toxicity

**1 in 5**

Attention Deficit Hyperactivity Disorder cases attributed to lead exposure

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



# Lead Poisoning Prevention in Sullivan County

Lead poisoning occurs when lead enters the bloodstream and builds up to toxic levels. Many different factors such as the source of exposure, length of exposure, and underlying susceptibility (e.g., child's age, nutritional status, and genetics) affect how the body handles foreign substances.



Lead in gasoline and paint has been banned in the United States since the 1970s, yet lead exposure and poisoning is still a problem in too many households. Did you know that today, exposure and poisoning from this toxic substance still affects millions of people? *The bad news?* While lead is harmful for everyone, it is even more dangerous to children and can cause lifelong and life-threatening health problems. *The good news?* Lead poisoning is largely preventable, and with increased education, we can help protect the lives of all children in Sullivan County.

As noted in the graphs on the next page, in 2018 in Sullivan County, an average of 46.11% of children aged 1 & 47.17% of children age 2 were tested for lead. In the first 9 months of 2019, an average of 48.79% of children aged 1 & 51.38% of children age 2 were tested for lead. Of the children that were tested in 2019, 13 tested positive for an elevated blood lead level of  $\geq 5\mu\text{g/dL}$ .





With this knowledge in hand, New York State has amended NYS Public Health Law to be enacted October 1, 2019 as follows: **“an Elevated Blood Lead Level will be defined as a blood lead level (BLL) greater than or equal to five micrograms per deciliter ( $\geq 5$  ug/dL). This means that all activities that were previously occurring at a BLL of  $\geq 10$  ug/dL for care coordination and  $\geq 15$  ug/dL for environmental management will be required at a BLL of  $\geq 5$  ug/dL.”**

These changes will affect the Lead Poisoning Prevention Program of Sullivan County Public Health Services Epidemiology Office and NYS DOH Environmental Management Office. The Lead Poisoning Prevention Program is managed by a Registered Nurse in the EPI office and with these changes will come an increase in case management duties which include:

- The education of families with children having an elevated blood level, the following of these children until there levels drop consistently below 5ug/dL
- Coordination and tracking of services necessary for each child, environmental assessment referrals to the NYS DOH Monticello Office and
- Education of the community at large.

SCPHS Lead Poisoning Prevention Program will be working diligently to educate all pediatric health providers in Sullivan County and partner with community based agencies to educate the public on these new guidelines and make moves to increase the percentage of children getting their BLL tested.



The following slides summarize the changes to the Public Health Law and the changes to Care Coordination between Sullivan County Public Health Services and Environmental Health.

There are several factors which, according to pediatric providers, which influence the testing numbers. The first is that some parents simply do not want their children stuck with a needle. We can help overcome this barrier through continued education about the importance of the test. A larger barrier to testing is transportation. Pediatric Practitioners will provide a prescription for testing, but the parents have difficulty getting their children to the hospital or lab to have the testing completed. This is a more complicated barrier to overcome requiring the collaboration of other community and county agencies.



Sullivan County Public Health, in collaboration with many community and governmental partners, continues to provide education and services on lead poisoning prevention. In addition to working with the New York State Department of Health, many different public health programs work together to provide these essential services. For example, Sullivan County Women, Infants and Children Program (WIC), conducts lead risk assessments on program recipients, and provides nutritional counseling for families who appear at risk for lead exposure. The Maternal Child Health Program conducts home visits for children with elevated blood lead levels to provide child assessment and parent education and support. The Public Health Educators assist in disseminating information about lead poisoning prevention methods at the many outreach events and health fairs they attend throughout the year.



According to the CDC, there is no known safe level of lead exposure. Even low levels of lead can damage the brain and kidneys, as well as the reproductive, cardiovascular, circulatory, and immune systems. Lead is especially dangerous for children’s developing brains, causing reduced cognitive ability and attention span, impaired aptitude for learning, and increased risk for behavioral problems.

# Basic Lead Poisoning Information

Lead poisoning occurs when lead enters the bloodstream and builds up to toxic levels. Many different factors such as the source of exposure, length of exposure, and underlying susceptibility (e.g., child's age, nutritional status, and genetics) affect how the body handles foreign substances.

**No safe lead level in children has been identified.** Here are important facts to know about lead exposure and its potentially harmful effects.

- Lead is a toxic element, especially in young children. When absorbed into the body, it can result in damage to the brain and nervous system, learning and behavior problems, slow growth and development, and hearing and speech problems.
- Lead poisoning is preventable! The key is preventing children from coming into contact with lead.
- Lead can be found inside and outside the home. The most common source of exposure is from lead-based paint, which was used in many homes built before 1978. Children can be exposed by swallowing or breathing in lead dust created by old paint that has cracked and chipped, eating paint chips, or chewing on surfaces coated with lead-based paint, such as window sills.
  - There are simple steps that can be taken to protect family members from lead-based paint hazards in the home, such as regularly cleaning the home, washing children's hands and toys often, and wiping shoes before entering the home.
  - If you live in a house built before 1978, a certified inspector or risk assessor can be hired to check your home for lead-based paint or lead-based paint hazards.
  - Lead can also be found in drinking water. The most common sources of lead in drinking water are lead pipes, faucets, and fixture.
- Other examples of possible sources of lead include some metal toys painted with lead-based paint, furniture, furniture painted with lead-based paint, some metal-containing jewelry, some imported items (i.e., health remedies, foods and candles, cosmetics, powders or make-up used in religious ceremonies), and lead-glazed pottery or porcelain.

- Children can become exposed to lead by:
  - Putting their hands or other lead-contaminated objects in their mouths
  - Ingesting lead-based contaminated dust
  - Eating paint chips found in homes from peeling or flaking lead-based paint
  - Drinking water that comes from lead pipes
  - Playing in lead-contaminated soil
  - Eating food made with lead-containing imported spices or candles
  - Using ceremonial make-up or powders that contain lead
- Some children are at greater risk for lead exposure than others, including those who are:
  - From low-income families
  - Living with adults whose jobs or hobbies involve working with lead
  - Members of racial-ethnic minority groups
  - Recent immigrants
  - Living in older, poorly maintained rental properties
- Adults may also unknowingly bring lead dust into their home from their jobs or hobbies.
- During pregnancy, women may crave nonfood items (pica) that may contain lead, such as soil, clay, or crushed pottery.



About 3.6 million American households have children under 6 years of age who live in homes with lead exposure hazards. According to the CDC, about 500,000 American children between the ages of 1 and 5 years have blood lead levels at or above the CDC blood lead reference value (the level at which CDC recommends public health actions begin).