Drive to Stop Lead Poisoning Begins

10-16-70 - 1-74

By NANCY HICKS

Based on a new public awareness, a fragmented but growing movement to eradicate lead poisoning has begun around the country.

Over the last year, interest in the disorder, often called "the silent epidemic," has caught on in the medical profession and in the social service and community action movements.

No one is certain just how serious the lead poisoning problem is. Although estimates run as high as 225,000 children intoxicated annually, only six major cities and seven states keep statistics. "If you live in an American city with a slum population, and you don't have many cases of lead poisoning, then your health department is not doing its job," said Dr. Evan Charney, associate professor of pediatrics at the University of Rochester School of Medicine and Dentistry. "The number of cases depends on how hard people look."

Lead poisoning, which was at one time an occupational disease, most often occurs in poor neighborhoods where children nibble the peeling lead-based paint found in deteriorating housing. Children one to six years of age are the primary victims, and more than 80 per cent of cases occur in children between 18 and 36 months. Extreme ingestion can cause swelling of the brain, brain damage or death. The National Center for Health statistics estimated that 122 children died of lead poisoning during 1967.

Experts who have worked in the field for years say the problem nationally is probably no more serious now than it ever was. Many more persons know about it, however, and that knowledge has spurred action, however.

$30-Million Appropriated

Earlier this week, the House voted to appropriate $30-million to aid localities in eliminating lead poisoning. The fund would underwrite up to 7 per cent of the cost of screening old housing and removing lead-"I think we have been very consolidating more than two dozen bills dealing with lead poisoning that were introduced in the current session of Congress.

Many cities, like San Francisco, are beginning pilot screening programs to try to determine just how serious their lead problem is. Other cities, like New York, Baltimore, Chicago, Philadelphia and Washington, have included a housing clean-up component with mass screening.

More community groups and individuals are beginning court actions against landlords in whose buildings children were poisoned and sustained permanent brain damage. Three cases have been won.

But along with this activity is a great deal of controversy and confusion that make a concerted program of eradication difficult. Among some of those complex factors are the following:

¶Lead poisoning is not a medical problem. It is a housing problem. Since most buildings built before World War II probably have lead paint on the walls, preventive programs have been called overwhelmingly "unrealistic."

¶Because early symptoms are so nonspecific—vomiting, nausea, crankiness, general malaise—cases are often misdiagnosed.

¶Detecting an inordinate build-up of lead in children's bodies has been difficult. The urine test, which has been used most widely throughout the years, has been discredited by many doctors as only 70 per cent accurate. Most large clinics have switched to testing blood samples, but collecting a specimen half the size of a shot of whisky from small children requires the use of trained technicians. Tests using smaller amounts of blood have not yet been perfected.

¶Once a child is tested, what constitutes poisoning? Different places use different blood-levels as criteria. There is no minimum established level at which either symptoms or damage are known to occur.

¶The cause of pica, the craving for nonfood items, cannot be agreed upon by doctors. Some feel the behavior results from dietary deficiencies; others feel it is a psychological problem. Most experts subscribe to neither theory. Half of all mothers of children with pica have pica themselves.

An abnormally high lead level in a child with pica is not difficult to attain. A piece of paint the size of a thumb nail—eaten three times a week over a period of several months—can make a child sick.

Lead Tastes Good

Lead tastes good to children. Dr. Hyman Merenstein, assistant director of the pediatric outpatient department at Kings County Hospital in Brooklyn, could not figure out why children took to lead and kept going back to it. So he tasted it himself.

"It's surprisingly good," he said. "It has a sweet taste—kind of like a cordial candy—with a kind of alcoholic aftertaste."

Dr. Dudley Anderson, chief of accident prevention division of the District of Columbia Health Service said he found cases where children stuck their lollipops to the wall, pulling paint off on the candy as a coating.

Once ingested it stays in the body, settling in the bones and affecting the blood and kidneys. Anemia is virtually always present in lead poisoning cases. Once swelling of the brain has set in, there is a 25 per cent chance of brain damage. Subtle neurological effects of lower levels of intoxication have not been estimated. It takes the body twice as long to excrete lead as it did to accumulate it.

Baltimore was the first city to recognize that lead poisoning was a problem. It began collecting figures in 1931. In 1935 it started free blood testing, and in 1957 it started a mass screening program. When housing in a selected slum area was tested for the presence of lead, 60 per cent contained levels "dangerous" to children. When the program of screening began, only 24 cases had been reported annually. That number rose to 304 in 1966, as usually happens when systematic screening is undertaken.

Each child with an elevated lead-blood level is detoxified and his house is "deleaded" to eliminate the source of the poisoning. So far this year, there have been only 19 cases reported in Baltimore, and the first death in three years occurred last month.

The Baltimore situation is now pretty much under control, according to Dr. J. Julian Chisolm Jr., the assistant chief of pediatrics of Baltimore City Hospital and an associate professor of pediatrics at Johns Hopkins Medical School. Dr. Chisolm is one of the nation's leading authorities on the problem.

Chicago was the second city to begin mass screening. Since 1966, 160,000 children have been tested. Of 28,000 children tested in 1967, 8.5 per cent were found to have blood lead levels higher than .05 milligrams per 100 cubic centimeters of blood.

Anything over .04 is considered above normal, although most cities use the .06 level to indicate "a case."

Other cities are beginning to look.

In January of this year, New York City set up a $2.4-million screening program for the 120,000 children living in the South Bronx, Harlem, Central Brooklyn and the Rockaway area of Queens. Children from those areas are considered "at risk."

There are 1.3 million city apartment units built before World War II—almost all contain lead—of which one third are deteriorating.

Fifty-five thousand children have been tested so far this year. Forty-five per cent have been found to have blood-lead levels of .04. Seventeen-hundred were above the .06 level, but Dr. Vincent Guince, head of the city program, estimates the real incidence closer to 8,000.

Once a child is "poisoned" a sanitarian visits his home to test for lead. If the walls contain more than one per cent lead, they must be covered by wall boards that extend at least four feet above the floor.

Painting over old paint does not reduce the hazard. Because the landlord must first be given a chance to do the job before the city does, it often takes five weeks for an apartment to be renovated. If the child is in the hospital undergoing treatment, he will have to stay until his home environment is safe.

The city program has come under much criticism: its laboratories are sloppy, fixing an apartment takes too long, the blood-lead level for "poisoning" should be lowered. But the biggest complaint of this and other programs is that they do not give enough emphasis to "prevention."

Dr. Chisolm estimates that once a child has sustained severe brain damage, the cost of caring for him in special institutions for the rest of his life is more than $220,000. The minimum cost of a 30-day hospital stay and two years of outpatient follow-up is more than $1,000.

Deleading a standard, row-type attached home in Baltimore runs from $300 to $600. If interior windows and doorways are scraped too the figure becomes $1,200. The cost of fixing a New York City apartment is $150.

"The community is spending the money, but they're spending it the wrong way," Dr. Chisolm said.

Dr. Laurence Finberg, chief of pediatrics at Montefiore Hospital and Medical Center in the Bronx, estimates that more children in the city are brain damaged because of lead than were by measles before the immunization program began.

N39170