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Improved Action Against Lead Poisoning in Rochester*

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Improved Action Against Lead Poisoning in Rochester¹

by

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Tests of a drop of blood are used to screen Rochester children for signs of lead poisoning. Where a hazardous exposure has been found, lead paint is suspected as the source. The residence is inspected and cleanup is enforced by officially coordinated actions of four County and City government agencies:

- Childhood Lead Poisoning Prevention Program (Lead Program) of the Monroe County Health Department (MCHD),
- Housing Unit of the County Department of Social Services (DSS),
- City Office of Code Enforcement,
- Healthy Neighborhoods Program of the MCHD.

The County's Lead Program teaches city residents and property owners how to protect children from lead poisoning. It follows exposed children to make sure that they are moved out of harm's way and brought for medical checkup and treatment. It gives special attention to houses that poisoned several children in sequence, and to city tracts where cases of lead poisoning are clustered.

This Bulletin shows how all these tasks have been greatly upgraded since 1985. The Lead Program was losing funds and personnel when the Rochester Committee for Scientific Informa-

¹ This Bulletin is dedicated to the Dr. Olga Berg. Neither a celebrity nor a cheerleader, Olga quietly led the greater Rochester community into awareness of its environmental problems and thence toward ways of addressing those problems. The importance of her voluntary contributions over twenty-five years to the environmental health of this region are incalculable. We have all benefited from her gentle, dispassionate advocacy of a safer, cleaner, better environment.

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tion (RCSI) started converting the Program's records into a computerized data base, with support from the Daisy Marquis Jones Foundation. Analysis of the data brought support for upgrading the Lead Program from the County Board of Health and the League of Women Voters, and then from County and City governments and private foundations. A task force set up by the County Legislature now meets regularly to assure the cooperation of all agencies concerned and monitor the progress of cleaning up lead hazards.

Background

Community action to protect children from brain damage by lead poisoning started in Rochester in 1967, when the RCSI published a report linking cases of lead poisoning to dilapidated city housing [1]. Then, a team of inner city teenagers was trained by RCSI's David Wilson to sample chipping indoor paint, and either spot-test the samples for lead or have them tested in a laboratory [2]. Student Parent Advisors to the Neighborhood (SPAN), a local action group led by David Anderson, secured the first federal grant to work on eliminating lead poisoning of children in Rochester. The grant was later taken over by the MCHD under the heading of the Childhood Lead Poisoning Prevention Program (Lead Program).

A special program was needed because standard sanitation and public health measures could not cope with the problem. The children most at risk came from distressed families in old rental housing. Giving a new coat of paint to a room did not remove the hazard of lead lurking in the underlying layers. The parents were not in a condition to take warnings of an obscure hazard seriously, or to come for repeated appointments to clinics. Even where children did not chew on paint chips and floors were swept clean, a child could pick up toxic amounts of lead from dust in the house or the soil outside through normal hand-to-mouth behavior.

The Lead Program educated school children, parents, and house owners about lead poisoning. It searched out children at risk by testing blood samples. It reached parents of exposed children through house calls and followed up on remedial measures. It inspected houses for chipping lead paint, moved families out of harm's way, and enforced cleanup by the owner. The number of children found at risk shrank from year to year, partly thanks to the program, partly because the State banned the use of lead in indoor paint, and partly because the federal government started to phase lead out of gasoline [3]. However, the hazard lurked unabated in old houses where lead paint remained on the walls and woodwork.

The program gradually lost personnel due to cuts in federal funding [3]. As positions were cut, so were essential activities:

- community education programs were gradually let go;
- outreach and follow-up of children at risk stopped for lack of personnel both in the Lead Program and in the cooperating neighborhood health centers ;

- house inspections by the Program were cut by half;
- enforcement of cleanup was handicapped by divided responsibilities of County and City agencies.

By 1985, the numbers of lead-poisoned children started going up again.

A New Look at the Problem

In 1983, RCSI came back to review the problem of childhood lead poisoning. With the aid of a grant from the Daisy Marquis Jones Foundation, RCSI undertook to convert ten years' worth of handwritten Health Department records into a computerized data base. The records included Lead Program files on individual children tested or treated for lead poisoning, laboratory reports of blood tests, inspectors' reports on lead hazards in houses, and actions related to cleaning up the hazards.

The objectives were:

- to trace the records of every child found with signs of exposure to lead, while protecting privacy;
- to find the address at the time of exposure to lead, and link the records of other residents in the same dwelling, and
- to track every house where a child showed signs of exposure to lead.

Information about the house was directed to several questions:

- what did the health authorities and housing authorities do about the hazard in each house?
- what did the owner do to clean up the hazard?
- was the house made safe for families that moved in later?
- mapping (geocoding): which neighborhoods exposed most children to lead?

A computer program to do the job was outlined and tested by RCSI users (G. Berg and H. Booth), and written and debugged by programmer William Martens using SAS software. The grant covered the costs of programming and data entry. Volunteer help was provided by the Lead Program and by RCSI. The data base initially resided in the University of Rochester mainframe computer. It was transferred to a personal computer acquired by the Lead Program in early 1986, where it is now used to keep records of tested children, their families, and their places of residence and to generate reports.

Information from the data base became available at a time of crisis [3]. It showed that:

- some residences poisoned children repeatedly, years apart;
- half of the children found at risk dropped out of the system without a second look;
- in 1985, for the first time in ten years, the number of children found with elevated blood lead levels (EBL) was higher than in the year before .

Renewed Action against Lead Poisoning

Two organizations joined the RCSI in the effort to upgrade the Lead Program. The Environmental Health Advisory Committee of the Monroe County Board of Health (Jeffrey Williams) provided a management study of the needs and resources of the program. The League of Women Voters (Alice Young) developed informational flyers and lobbied. Help was offered by the County Manager Lucien Morin, by the City Commissioner of Community Development Jeffrey Swain, and by the Monroe County Legislature.

County legislator Nan Johnson appointed a task force on childhood lead poisoning. This brought together, for the first time, the governmental and civic organizations which worked on the problem:

- for the County: the Legislature (Nan Johnson) , the County Board of Health, the DSS, and the Lead Program;
- for the city of Rochester: the City Council (Lois Giess), and the City Office of Property Conservation (OPC);
- for civic organizations: the RCSI (initially, Olga Berg), and the League of Women Voters.

The Task Force meets regularly to coordinate the control of lead poisoning by government agencies and advise the legislators. It advised and supported a series of improvements in the program:

- The County budget made up for some of the lost Federal funds. Through legislative action, two locally funded positions were created to replace those lost. The Lead Program was able to expand three key activities: testing children for EBL, outreach to exposed children to assure medical follow up, and inspections of properties where tests were positive.
- Community education was reinstated. Continuing education is especially needed to reach families of new mothers, newcomers to the city, and new owners of old houses [4]. A senior public health educator was hired (half-time). The Lead Program obtained grants totaling \$19,627 from three private foundations (The Daisy Marquis Jones Foundation, Rochester Telephone and the Gannett Foundation) and a \$10,000 grant from the Monroe County Office of Community Development to expand educational activities in the community by acquiring additional educational staff, preparing literature and purchasing audiovisual materials and equipment.
- Government agencies agreed to work together, instead of following disparate rules and timetables. No longer will a house cited for lead hazards drop from the au-

thority of the MCHD without being picked up by the City's OPC. No longer will DSS pay the rent to a landlord who evades the Lead Program's orders to clean up.

Coordinated Action of County and City Agencies

Formal protocols were developed for joint action by the Lead Program, the DSS, and OPC. When a property located within the City limits is cited by the Lead Program, copies of the letter are forwarded to the OPC for enforcement of the building code, and to the DSS Housing Unit if the child's family is receiving DSS assistance. State law requires the DSS to withhold rent until the violations have been corrected. Action by inspectors of the City's Office of Code Enforcement, and the threat of rent withholding by the DSS have put teeth into the Lead Program's efforts to have the lead hazard cleaned up by the landlord.

The Lead Program increased the number of children screened for exposure to lead, and extended screening beyond the most readily reached clients of neighborhood health centers and children's clinics [5]. Positive tests are grouped by census tract, high-risk areas are identified, children in such areas are tested every six months, and their residences are reinspected. The extended screening program will help to meet a public health need identified by the RCSI — the need to reach children of "invisible" families that stay out of range of community health services [6].

"Repeat properties," that is addresses where two or more children in succession have been exposed to lead, have been called "poison houses" by the press [7]. These properties have been the major environmental health concern of the RCSI [6]. The MCHD (Dr. Mark Merkens) singled out repeat properties for a more thorough cleanup. The MCHD's Healthy Neighborhoods Program receives a periodically updated list of repeat properties, which it includes in its work of upgrading the sanitary condition of inner city housing.

An agreement signed by Rochester Mayor Thomas Ryan and Monroe County Executive Thomas Frey specified the responsibilities of the Lead Program and the OPC for the identification and abatement of lead paint hazards. The Lead Program Coordinator (Kate Wylie) meets with the OPC Director (Victor Morrison-Vega) and his staff on a monthly basis to deal with houses that exposed children to lead.

An inspector has been hired by the City to check houses for lead paint hazards, and an inspection protocol has been established. Currently, three kinds of houses are inspected on a priority basis:

- repeat properties,
- City-owned houses, and
- HUD-assisted properties [8].

City inspectors received better equipment. The usual way to check house paint for lead was to send a paint chip for chemical analysis to the Environmental Health Laboratory of the MCHD. The inspector could only check surfaces that have begun to chip, and had to wait for results. A portable instrument called the X-Ray Fluorescence Analyzer (XRF) overcame these difficulties. The XRF reads the lead concentration directly when pressed against a surface, and leaves no mark. The Lead Program owned and used XRF units. The City has now obtained a user's license and purchased a unit of its own [9].

A look at the Lead Program's data base in the coming years will tell how well these new efforts succeed in removing a stealthy poison from the Rochester landscape.

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