childhood lead poisoning prevention program 2008-2009 ANNUAL REPORT

he goal of the Southern Nevada Health District Childhood Lead Poisoning Prevention Program (CLPPP) is to eliminate lead poisoning as a significant health risk for children living in the state of Nevada. These efforts started in Clark County, where over 70 percent of the state's population resides, with the hope of expanding to Northern and rural Nevada by the end of the grant term.

The CLPPP is divided into five workgroups composed primarily of community stakeholders from public and private organizations throughout Nevada. CLPPP staff also participates in each of these workgroups: Screening & Case Management, Surveillance, Primary Prevention, Legislative Affairs, and Evaluation.

The following report illustrates accomplishments achieved during project year III by each workgroup that go beyond the specified goals and objectives for grant year III.

Screening & Case Management

During project year III, nine new cases were opened for children age 72 months and younger, having a blood lead level greater than or equal to $10\mu g/dL$. There are currently 11 cases remaining open. The most common cause for lack of case closure is the requirement to obtain two blood lead results of less than $10\mu g/dL$. Completion of this requirement is problematic due to two obstacles. First, medical providers in Clark County often cease testing after receiving one result showing the child's blood lead level has dropped below $10\mu g/dL$. Additionally, parents often tend to be less concerned once their child's blood lead level has decreased. As a result, a new protocol will be developed for the next project year to allow case closure with one blood draw below 10µg/dL, followed by sufficient effort to contact the parents within two months for a follow-up blood draw.



The case manager monitors medical care, including regular blood tests, until the child's blood lead level is less than $10\mu g/dL$. If necessary, she also coordinates treatment and/or hospitalization for an affected child. Education about lead hazards and lead exposure prevention is provided to every family and, when needed, referrals to other services are also provided. Examples of other services include Nevada's Early Intervention Services for developmentally delayed children and the Nevada Special Supplemental Nutrition Program for Women, Infants and Children (WIC).

The health district defines screening as a capillary or venous blood draw to test for detectable blood lead levels. This definition differs from some, including the Centers for Disease Control and Prevention (CDC), that recommended a survey tool be used to determine a child's risk of exposure before conducting a



blood lead screening. However, due to limited data regarding lead incidence and prevalence in the local community, the health district has yet to endorse this method of screening.

Health district screenings using the LeadCare® II blood lead analyzer continued during project year III. The Screening & Case Management team screened 460 children at 10 community events, four of which were faith based.

The majority of community outreach screenings were conducted in ZIP Codes where children may be at an increased risk of an elevated blood lead level due to income, ethnicity and/or housing. Over the past year, health district staff also conducted screenings onsite for 636 children 72 months of age and younger using the Leadcare® II blood lead analyzer. In addition, screenings were conducted in partnership with the Head Start program at 10 different locations. The CLPPP continues to refine its identification of target ZIP Codes as data is collected and analyzed.

Throughout the year, the nursing case manager conducted lead education and training activities. She trained nurses to use the LeadCare® II analyzer; presented education of health care professionals regarding the process of obtaining a LeadCare® II CLIA-waived blood lead analyzer for private use, developed a screening plan designed to target diverse ethnic groups, (e.g., African American, Asian and Hispanic), and conducted activities that foster knowledge and support for the CLPPP's transition to a comprehensive Healthy Homes program.

ENVIRONMENTAL INVESTIGATIONS

An environmental investigation (EI) is conducted as part of case management when a child age 72 months and younger is found to have a blood lead level greater than or equal to $10\mu g/dL$. The only exceptions are if the family refused visitation or relocated out of state. Investigations examine both traditional sources (e.g., paint, tile, windows) and nontraditional sources (e.g., imported candy, toys or jewelry) of lead in a child's home. During the course of the investigation, health district EPA-certified risk assessors notify parents or guardians regarding positive readings obtained using an XRF analyzer and provide guidance on how to protect themselves and their families from lead exposure hazards.

Environmental samples, such as soil, dust, water, food items, etc., are dispatched to a laboratory for testing. Once all results are received, staff prepares a final report with information and recommendations on how to address lead hazards. The report is then shared with the family.

This past project year, all nine cases received an EI within two weeks of the case being opened, per protocol. Cases were located in multiple areas of Southern Nevada, with the majority living in central Las Vegas (44 percent).

Seven of the nine children lived in a home built prior to 1978, however, in most cases housing components were not found to be the cause of the child's lead exposure. There were two instances of lead found in tile, one in mini blinds, and one on plastic trim on a bedroom closet door frame. A common source of lead identified in the homes was ceramic dishes and pots that were used for cooking or serving food (found in 56 percent of homes investigated). Of the nine cases, it was determined that only one child was exposed through housing-related sources due to unsafe renovation activities conducted by the family. In only three other EBL cases was the presumed source identified. Additional leaded items found in these homes included plastic beads on a decorative vase (which had been consumed by the case), imported candy, and Surma,

a make-up imported from the Pakistan/Afghanistan region.

Surveillance

From July 1, 2008 to June 30, 2009, a total of 10,595 children age 72 months and younger were screened. Overall, 10 percent more children were screened compared to FY 07-08, making this year's increase much more conservative than project year II's very marked increase of 73 percent. This may be attributed to a local regulation mandating physicians to report blood lead levels indicating an exposure to lead beginning in January 2007. Thus, the increase in reports received during FY 07-08 may have represented increases in both reporting and screenings. FY 08-09's statistics most likely represent an actual increase in the number of screenings being performed.

Six percent of all screenings done in Clark County during this project period were done by health district staff using the LeadCare® II blood lead analyzer. Health district clinics not equipped with a LeadCare® II refer children to local commercial laboratories for screening. Two percent of total screenings this year were done by health district staff through referrals to commercial laboratories. In total, eight percent of all screenings done in Clark County during this project year were done by health district staff.

Of all target-aged children screened this year, racial data was only reported for approximately 5 percent and ZIP Code data was only reported for 31 percent of children. This lack of data illustrates the CLPPP's need to work with local labs to develop a blood lead lab reporting form that

SCREENING TOTALS BY SEX

Children Age 72 Months and Younger (July 2008-June 2009)

	Total	Male	Female	Sex Unknown
Number Screened	10,595	5,405	5,173	17
BLL 0μg/dL	8,281	4,211	4,064	6
Detectable BLL	2,314	1,194	1,109	11
>0µg/dL and <5µg/dL	2,107	1,085	1,014	8
≥5µg/dL and <10µg/dL	192	104	85	3
≥10µg/dL *	15	5	10	0

* Only children with confirmatory blood lead results are included.

Children with BLLs $\geq 10\mu g/dL$ are counted during the month they were identified regardless of whether they were identified during their first or subsequent tests. Totals include venous and capillary test results except for BLLs $\geq 10\mu g/dL$ which are all confirmatory. Children with capillary test results $\geq 10\mu g/dL$ and confirmatory venous testing below $10\mu g/dL$ are classified under that lower BLL. If no confirmatory testing was performed for a child then that child was classified as having a result of zero. This occurred with a total of 8 children.



PARTIAL LIST OF OUTREACH ACTIVITIES

Health-related Events/Fairs

- St. Rose Dominican Hospital Fair (50 people)
- Back to School Fair Walnut Community Center
- Lied Clinic (161 families)
- Southern Nevada Health District Lead Week Screening and Toy Testing
- Walking with Weekly for Health Community
- Kids Health Care

Presentations to Faith-Based Organizations

- Iglesia Amistad Christian Church
- Interfaith Council of Southern Nevada
- Concejo Pastoral de Las Vegas
- Clark County Ministerial
 Association
- Community Interfaith Council

Presentations to Professional Organizations

- University of Nevada School of Medicine (30+ *health care professionals present*)
- Head Start Teacher Training (70+)
- Pediatric Grand Rounds at Renown Hospital in Reno
- Online Turf Seminar Open Cross County
- Valleywide Antimicrobial Stewardship

collects pertinent demographic information.

Of the children screened this year (n= 10,595) approximately 21.8 percent had a detectable level of lead in their blood.

- 19.9 percent had blood lead levels >0µg/dL and <5µg/dL
- 1.8 percent had blood lead levels ≥5µg/dL and <10µg/ dL, and
- 0.1 percent had levels $\geq 10 \mu g/dL$

Primary Prevention

The Primary Prevention Workgroup brings awareness about the issue of lead exposure to the Southern Nevada community through a three-fold effort:

- education of the community at large through various outreach activities
- (2) education of the medical community
- (3) determination of appropriate locations to conduct lead hazard risk assessments of child dwelling facilities in Southern Nevada.

The workgroup meets monthly to plan activities to accomplish these goals and help organize special activities.

During the October 2008 National Lead Poisoning Prevention Week, the workgroup organized several screening events. Proclamations officially recognizing this week-long event were received from both the Mayor and Council Members of the City of Las Vegas and the Board of Clark County Commissioners. A 15-minute PowerPoint presentation on the status of the health district's CLPPP was made to the Las Vegas City Council.

COMMUNITY OUTREACH

The Primary Prevention Workgroup has worked diligently to refine and distribute childhood lead exposure informational materials throughout Southern Nevada. New materials created this project year include

- "Prescription for Childhood Health" pads
- new marketing outreach plan
- lead poster in English and Spanish
- PowerPoint presentations designed specifically for African-American and Hispanic communities, the Acelero Learning Clark County Head Start Health Advisory Board and the Las Vegas City Council
- flyer to promote National Lead Poisoning Prevention Week
- promotional stuffed animal given to children who received a blood test

Community partners have been very helpful in assisting the program with reproducing existing educational materials. WIC printed a total of 10,000 brochures, and Head Start printed 1,200 lead fact sheets and brochures. Distribution of materials continues to increase with community partnerships. Health Plan of Nevada, whose physicians and health care professionals are responsible for Medicaid patients, distributed statewide more than 43,250 mailers with information about lead.

Primary Prevention Workgroup team members represented the CLPPP at more than 20 community outreach and educational events during the past project year. (See Page 4 for a partial list demonstrating the variety of events attended and the diverse populations that were reached.) The following products were distributed during outreach events:

- 3,530 bookmarks
- 1,370 English and 1,450 Spanish brochures (Note: The brochures are available online and may be downloaded so these numbers may be an underestimate of actual distribution.)
- 24 prescription pads
- 1,000 lead inspection flyers



Additionally, 6,000 bookmarks were inserted into packets containing health related information for all new mothers, distributed by the Protect and Immunize Nevada's Kids program and sponsored by the Southern Nevada Immunization Coalition.

Even though information has been distributed in the community, formal evaluation procedures have not been implemented to determine how this information is impacting the community's awareness of the dangers of lead exposure.

WIC also updated a lead lesson plan for parents and added a four-minute video regarding lead prevention. The "Prevent Lead Poisoning" rap video produced by the New Jersey Department of Health and Senior Services continues to be utilized in outreach efforts. To date, 250 English/Spanish DVDs of the video have been created and distributed locally.

During the previous year, the CLPPP coordinated with the Nevada Institute for Children's Research and Policy and the Sierra Community Healthcare Foundation to produce a public service announcement (PSA). During this project year, the PSA was presented to the SAC attendees in September 2008, and efforts are ongoing to secure airtime for its use. The PSA currently airs in the waiting areas of those health district facilities with audio/video capabilities.

The Primary Prevention Workgroup utilized local media outlets to inform the community about childhood lead exposure. Interviews were conducted with all major television news channels in Las Vegas. Radio interviews were also pivotal in this outreach effort.



Media activities included:

- The October 2008 ceremonial presentations in which the Las Vegas City Council and Clark County Commission recognized National Lead Poisoning Prevention Week were replayed six times during a two-week period on local government access television Channels 2 and 4.
- The PowerPoint presentation on the importance of screening children under the age of 6 for lead exposure was replayed six times on Channel 2.
- CLPPP project coordinator Dr. Keith Zupnik was interviewed by Channels 3 and 8 for features about lead hazards and National Lead Poisoning Prevention Week.

- Surveillance Coordinator
 Brenda Argueta was
 interviewed by Channels
 15 (Spanish) and 13 and the
 Spanish public affairs show
 Contacto for features on
 lead exposure in Southern
 Nevada's children and
 National Lead Poisoning
 Prevention Week.
- The largest weekly Spanish newspaper in the Las Vegas valley, *El Tiempo*, featured a story on lead exposure during National Lead Poisoning Prevention Week.
- Dr. Zupnik and Dr. Bill Berliner were featured on the KNPR State of Nevada public affairs live radio program during National Lead Poisoning Prevention Week.

- The Fall 2008 edition of UNLV Magazine featured Dr. Shawn Gerstenberger's research on lead poisoning in an article titled "A Healthier Nevada."
- Dr. Gerstenburger was interviewed on Channel 13 about the presence of lead in synthetic turf.
- KVEG radio aired a 30-second English/Spanish commercial encouraging lead inspections in older homes. This radio ad campaign was initiated by the Area Health Education Center (AHEC) of Southern Nevada and aired 48 times.
- MD News magazine featured Dr. Berliner, Dr. Rutu Ezhuthachan and Dr. Zupnik on the cover and published an article titled "Lead Poisoning

in Children: A Silent Threat in Southern Nevada." This magazine is distributed to all Southern Nevada physicians.

 CLPPP screening and case manager Gail Gholson was interviewed on KCEP Power 88 radio that has a predominantly African-American audience.

FOLK REMEDY PROJECT

Headed by the Primary Prevention Workgroup chair, the Folk Remedy Project focused on identifying and reducing lead exposure associated with the use of traditional practices within Hispanic communities. Families were invited to bring items to be tested for lead, were asked to complete a questionnaire, and were given a brief presentation about lead poisoning prevention. Families were educated about traditional clay and ceramic ware and consumables that may contain lead. They were also encouraged to have their children screened to determine if any exposure had occurred. A total of 218 surveys were collected from 16 school and church locations. Through this project, more than 150 items were tested for lead. Results of the survey are currently being analyzed and a report will be available next year.

HEALTH CARE PROVIDER EDUCATION & OUTREACH

The Primary Prevention Workgroup provided educational outreach to health care providers in Southern Nevada and began to expand educational efforts to Northern Nevada regarding the importance of screening children for lead. Overall, efforts involving the medical community included contact with approximately 125,250 health care professionals through various methods, such as radio, presentations and mailers.

After examining physician screening rates, letters encouraging lead screening were sent to physicians with the lowest rates. The letters indicated support by the health district and the Nevada Chapter of the American Academy of Pediatrics.

CLPPP also contacted obstetric and gynecological medical professionals to promote the blood lead screening of pregnant females; however, the program encountered some resistance since there is no official statement recommending blood lead testing of pregnant women.

A continuing medical education course is still offered on the AHEC of Southern Nevada web site, and a link can also be found on the health district web site. Notices about the course were sent to approximately 1,400 pediatricians, family practitioners, general practitioners and gynecologists. Anthem Blue Cross and Blue Shield mailed a flyer about the course to 196 independently contracted family practice providers. This year, no health care professionals participated in the on-line educational opportunity. While it was an off-year for CME requirements, the lack of participation is indicative of the challenges faced in providing outreach to the local medical community, as many hold firmly rooted misconceptions about safe lead levels and the importance of screening.

HOUSING BASED PRIMARY PREVENTION

As of June 30, 2009, EPAcertified lead risk assessors from the University of Nevada, Las Vegas (UNLV) Nevada Centers for Environmental Health Surveillance (NCEHS), along with other UNLV personnel, conducted 23 pre-1978 residential environmental lead hazard evaluations, five turf evaluations and one charter school evaluation. These inspections were conducted to begin assessment of the lead-based paint burden in the Southern Nevada housing stock. In addition to analyzing paint, the team also looked at other potential sources of lead found in the home at the time of the evaluation, such as housing related hazards that can impact health. Program participants also received lead brochures and

education during the evaluation. This was followed by a written report with investigation results and recommendations being mailed approximately 6-8 weeks after the completion of the lead hazard evaluations. Of the 23 investigations conducted during this project year, 78 percent had either an actual (13 percent) or potential lead hazard (65 percent). Actual lead hazards identified via XRF analysis were categorized as those surfaces found to be in poor condition, for example, chipping, flaking, and/or peeling paint. Potential lead hazards were those areas that, while positive for lead content, were found to be intact at the time of the investigation. The majority of actual lead hazards were minimal, but sources included paint, dust and tile. Potential lead sources came from additional areas such as bathtubs, mini blinds, and ceramic pots. Investigations were conducted in 10 different ZIP Codes in Southern Nevada with the majority (53 percent) conducted in 89030, which is one of the ZIP Codes targeted for prevention efforts.

The NCEHS staff has also begun assessing the possibility of lead exposure through artificial turf. Currently, artificial turf evaluations have been conducted in five area child care facilities. The results from these evaluations were combined with preliminary findings from studies of artificial turf on athletic fields conducted by the New Jersey and New York Departments of Health and will be presented in a forthcoming *Morbidity and Mortality Weekly Report* (MMWR), sponsored by the CDC, titled "Evaluating and Regulating Lead in Synthetic Turf."

PRIMARY PREVENTION CHILD CARE ASSESSMENTS

In project year III, the health district's Environmental Health Division (EH) staff conducted primary prevention lead hazard screenings of 51 pre-1978 child care facilities in Clark County.

During the child care assessments, paint and other potential sources of lead were analyzed. Approximately 76 percent of the child care facilities screened contained at least one lead hazard. The most frequent lead hazards detected in child care facilities were tiles on the floors, windows, bathroom walls, etc., ceramic sinks and various play equipment. A written report of the assessment was provided to each facility approximately 8-12 weeks after the completion of the evaluation.

During a health district community outreach product screening event, several pieces of do-it-yourself pottery tested with an XRF were found to contain high concentrations of lead. These pieces are hand-painted and glazed at local studios. EH staff visited both of the facilities implicated in the production of the pottery found to contain lead and was granted permission by the owner to collect dust samples from various areas. The sample results revealed high lead



concentrations exceeding the EPA/HUD clearance standard for floors. The facility then switched from using a food-safe leaded glaze, the suspected cause of the high lead dust concentrations, to a lead-free glaze. Several extensive cleanings were performed by the facility resulting in lead dust concentrations testing below the set standard for floors.

A notice was drafted by the health district that is to be posted in both facilities for one year, informing the public of the possible lead exposure. Additionally, health district staff recommended that the owner inform her employees about the lead exposure and ask them to have a blood lead test performed. It is not known if this recommendation was followed.

The CLPPP plans to expand these types of investigative activities to other public places, including elementary schools, to examine areas where children in kindergarten are active. Meetings, letters of agreement, and memorandums of understanding are currently underway in order to establish cooperation with the Clark County School District.

Legislative Affairs

The Legislative Affairs Workgroup focused efforts this year to pass Nevada's very first childhood lead poisoning prevention law. Throughout calendar year 2008, the workgroup refined the language of the bill draft and met with the bill's sponsor, Assemblyman Joe Hardy, to adopt the final language to present to the Nevada State Legislature during the 2009 session. Economic difficulties throughout 2008 made introducing and passing any bill with a fiscal note attached highly unlikely, so the language was crafted to avoid creating any additional financial obligations for the State.

As a result, Assembly Bill 219 was introduced by Assemblyman Hardy on March 2, 2009 and was co-sponsored by Senate Majority Leader, Steven Horsford. The bill contained three primary parts. The first part requires the Department of Health and Human Services to encourage health care providers to test children for elevated blood levels in accordance with Centers for Medicare and Medicaid Services (CMS) guidelines. In addition, the bill requires preliminary blood lead level results of 10µg/ dL or higher to be confirmed by a venous blood draw. Lastly, the bill requires laboratories to submit all blood lead level testing results conducted on children to the appropriate health authority in accordance with regulations adopted by the State Board of Health. This last section essentially allows the State Board of Health to adopt regulations which may specify the method of

reporting, as well as the contents of the reports. AB 219 was passed unanimously by both houses without amendments, and was signed into law by Gov. Jim Gibbons on May 19, 2009. The law went into effect on Oct. 1, 2009.

Assembly Bill 249 was introduced by Assemblyman Hardy on March 5, 2009, and was co-sponsored by Senators Horne and Cegavske. The bill primarily focused on provisions for the abatement of nuisances, such as rats, mosquitoes, flies, etc., but language was included that will ultimately allow the District Board of Health to adopt regulations relating to health hazards on residential properties, rental dwelling units, and commercial properties. This aspect of the bill relates to childhood lead poisoning prevention, as it defines a health hazard as "any biological, physical, or chemical exposure, condition or public nuisance that may adversely affect the health of a person." Lastly, AB 249 allows a hearing process to be generated to recover funds expended. It was passed unanimously, and was signed into law on May 23, 2009. The law went into effect on July 1, 2009.

Evaluation

The Evaluation Workgroup participated in all monthly project staff meetings and held quarterly workgroup meetings to discuss progress and implementation challenges with data tracking. A member of the Evaluation Workgroup also attended the CDC Evaluation Training in January 2009 to receive detailed training on evaluation implementation. Following this training, the Evaluation team worked with other CLPPP workgroups to arrange meetings with Harvard students as well as provide feedback for a final written report with suggestions for future evaluation efforts. Lastly, the Evaluation Workgroup assembled a process evaluation of one SAC meeting, as well as the overall CLPPP and, in conjunction with the health district project staff, contributed to the CLPPP annual report.

General CLPPP Accomplishments

STRATEGIC ADVISORY COALITION MEETINGS

Two meetings of the Strategic Advisory Coalition (SAC) were held this project year. The first meeting occurred on Sept. 22, 2008. This meeting included an update on the CLPPP's year II accomplishments, a presentation by Dr. Sheniz Moonie of UNLV regarding lead hazards and asthma, and a brief evaluation of the SAC meetings.

The second meeting was held on June 29, 2009. During this meeting, Therese Elliott of Rebuilding Together presented information regarding this organization's mission to provide safe, healthy housing to low income Americans. An overview of the Healthy Homes initiative was provided by Dr. Zupnik. These presentations were followed by updates from each workgroup chair informing attendees of their recent activities and progress.

PROGRAM EXPANSION TO NORTHERN NEVADA

During this past project year, the project coordinator hosted the Southern Nevada CLPPP expansion meeting in Northern Nevada, which was attended by approximately 30 individuals representing various entities. This meeting served to host four presentations about the CLPPP, including overviews of CLPPP function and structure, case management functions, and surveillance methodology.

CONFERENCES

The project coordinator attended several conferences to expand program knowledge and opportunities including the Healthy Homes conference in Orlando, the National Environmental Health Association Indoor Air Quality Asthma Triggers workshop in Washington, D.C., and the 2008 Healthy Homes Conference in Baltimore.

Supplemental Activities

Due to CLPPP's relationship with UNLV, several lead-related grants and projects have been implemented.

SUPPLEMENTAL GRANTS

A grant submitted to the Nevada Public Health Trust Fund by NCEHS and University Medical Center Hospital (UMC) was funded to conduct blood lead screenings for Clark County children, specifically targeting those who are uninsured or underinsured. UMC reported that 90 percent or more of the children that visit their clinics are from minority populations and would benefit from these screenings.

During the project year, a total of 1,048 potential participants were approached to join this study. Of these, a total of 811 (77.5 percent) actually enrolled in the study and over 50 percent of participants were in the target age group of 2 years of age and younger. Other demographic data collected during the study included gender (53 percent female, 47 percent male) and ethnicity (73.9 percent Hispanic, 26.1 percent non-Hispanic). Venous blood draws took place on-site at the Lied Ambulatory Care Center and Kids Healthcare Clinic, as well as at Quest Laboratories. The health district also offered capillary screenings



for those interested. A total of 564 blood samples were obtained through this study and results indicated that all children had blood levels below 10µg/dL.

LEAD IN CANDY PROJECT

This project addressed the emerging issue of leadcontaminated imported candies and methods used to identify this problem. There were four main objectives to this study:

 Develop an XRF screening protocol for the analysis of lead in imported candies and compare this method to previously established method(s).

- Screen large numbers of imported candy from various locations and remove tainted products from the market.
- Disseminate XRF protocol and screening methods nationwide to expedite removal of tainted candy.
- With collaborative partners, distribute results to the local community, including families and pediatricians, and coordinate with other agencies to provide lead poisoning prevention awareness to the community by expanding relationships.

At the date of this publication, objectives 1 and 2 have been completed. Ashley Phipps, a UNLV graduate student, completed a Master of Public Health (MPH) thesis summarizing this topic and it is available upon request. Candy screening efforts are continuing through a collaborative effort between UNLV and the health district.

TOY SCREENING PROJECT

This project concentrated on screening toys in child care facilities in Southern Nevada. Approximately 50 toys were chosen as a sample from each child care facility. If the toy had a lead concentration equal to or greater than 600 parts per million, it was cleaned and tested again to ensure the lead was from the toy and not the surrounding environment. If the test remained the same, the toy was removed from the facility.

Ten child care centers were visited for this project and a total of 535 toys were examined via plastics XRF analysis. Twenty-nine toys exceeded the 600 ppm standard. Nine of the 10 sites contained toys with detectable levels of lead. Joseph Greenway, a UNLV graduate student, completed a MPH thesis summarizing these data and it is also available upon request.

DEVELOPED BY THE SOUTHERN NEVADA HEALTH DISTRICT CHILDHOOD LEAD POISONING PREVENTION PROGRAM AND THE NEVADA INSTITUTE FOR CHILDREN'S RESEARCH AND POLICY



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