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ATTACHMENT 1

List of Participants

ACCLPP Members
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Dr. Valerie Charlton
Dr. Deborah Cory-Slechta
Dr. Sher Lynn Gardner
Dr. Kimberly Hansen
Ms. Linda Kite
Dr. Michael Kosnett
Dr. Brenda Reyes
Dr. Megan Sandel
Dr. Gail Wasserman
Mr. Dana Williams, Sr.

Designated Federal Official
Dr. Mary Jean Brown, Chief
Lead Poisoning Prevention Branch, CDC

Ex-Officio and Liaison Members
Dr. Walter Alarcon (National Institute for Occupational Safety and Health)
Dr. Helen Binns
(American Academy of Pediatrics)
Ms. Margaret Easly (American Academy of Nurse Practitioners)
Dr. Warren Friedman (U.S. Department of Housing and Urban Development)
Dr. Benjamin Gitterman
(American Public Health Association)
Mr. Steve Hays (American Industrial Hygiene Association)
Dr. Ezatollah Keyvan-Larijani (Council of State and Territorial Epidemiologists)
Ms. Jane Malone
(Alliance for Healthy Homes)
Ms. Rebecca Morley (National Center for Healthy Housing)
Ms. Jacqueline Mosby
(U.S. Environmental Protection Agency)

Dr. George Rodgers, Jr. (American Association of Poison Control Centers)
Dr. Walter Rogan (National Institute of Environmental Health Sciences)
Ms. Lori Saltzman (U.S. Consumer Product Safety Commission)
Dr. Phyllis Stubb-Wynn (Health Resources and Services Administration)

CDC Representatives
Sara Browning (CDC Contractor)
Barry Brooks
Douglas Farquhar
Larry Franklin
Samantha Harrykisson
Jeffrey Jarrett
Claudine Johnson
Jamieson McDermott (CDC Contractor)
Elizabeth Millington
Debra Mollet
Marissa Scalia
Paula Staley
Connie Thomas
Charlotte Williams

Guest Presenters and Members of the Public
Erwin Berg (Distributor, ESA Biosciences)
Craig Boreiko (International Lead Zinc Research Organization & International Lead Management Center)
Mark Carlton (Public)
Vivian Cross (Foundation for Educational Advancement, Inc.)
Donna Piltterere Dugan (National Committee For Quality Assurance)
Adrienne Ettinger
(Harvard School of Public Health)
Lucy Hicks (County of San Diego CLPPP)
Alan Johanns (City of San Diego Environmental Services Department)
Minutes of the Meeting

The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC), National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR), Lead Poisoning Prevention Branch (LPPB) convened a meeting of the Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP). The proceedings were held on October 29-30, 2008 at the Westin Hotel in San Diego, California.

Opening Session

Dr. George Rhoads, Chair of ACCLPP, called the meeting to order at 1:10 p.m. on October 29, 2008. He welcomed the attendees to the proceedings and particularly recognized three new ACCLPP members: Dr. Kimberly Hansen, Dr. Brenda Reyes and Mr. Dana Williams, Sr. Dr. Rhoads opened the floor for introductions; the list of participants is appended to the minutes as Attachment 1.

Dr. Rhoads announced that voting members with a real or perceived conflict of interest related to any item on the October 29-30, 2008 ACCLPP agenda would be responsible for identifying these issues and recusing themselves from voting on these topics or participating in these discussions.
Update on LPPB Activities

Dr. Mary Jean Brown, Designated Federal Official of ACCLPP and Chief of LPPB, covered the following areas in her update. The Interagency Task Force on Non-Essential Uses of Lead published a comprehensive review of lead sources in children’s environments. The paper was distributed to ACCLPP for review.

CDC and the Harvard School of Public Health will co-sponsor a symposium in October 2009 in Toronto, Canada. This event will allow a diverse group of ~100 experts to explore strategies that meet the need for metals in the current economy and still protect the health of individuals and the environment. The participants will represent academia, science, industry, impacted communities and relevant technology sectors.

The overarching goal of the symposium will be to take initial steps in systematically addressing environmental lead exposures from metal mining and smelting. The participants will be asked to discuss approaches that utilize, leverage and expand previous efforts by the World Bank and the International Council on Mining and Metals. The public health aspects of metal mining and smelting sites, financial resources that can be used in the cleanup of past environmental disasters, and informal smelting will be key focus areas of the symposium as well.

LPPB has allocated seed funding for the symposium and the Harvard School of Public Health is actively recruiting donors from industry and private foundations to support this event. However, the ability to hold the symposium in October 2009 will depend on resources and fundraising efforts. Additional information on the symposium can be obtained from the Harvard School of Public Health web site.

LPPB completed an investigation in response to North Dakota’s request for CDC to address lead exposure associated with the consumption of large game killed by lead bullets. A large proportion of this meat is donated to food pantries in Western and Northwestern states and is an important source of protein for many residents. LPPB conducted a retrospective cohort study in May 2008 to determine whether game consumption was associated with an increase in blood lead levels (BLLs) in persons >9 years of age.

The outcomes of the study are being scientifically vetted within CDC at this time, but preliminary results indicate a moderate increase in BLLs from game consumption on the order of 0.3 µg/dL on average. The study also found a dose-response relationship between higher BLLs and persons who consumed more game. None of the study participants had BLLs >10 µg/dL and ~20% of persons who were tested had undetectable BLLs. However, the results of the study will have political and financial implications because most of North Dakota’s economy is based on game hunting by tourists. LPPB expects to release formal recommendations on this issue over the next 6-8 weeks.

LPPB is investigating elevated BLLs (EBLLs) in refugee camps in Thailand and new EBLL cases after refugees were relocated to Atlanta, Georgia and Omaha, Nebraska. Fish paste consumption has been associated with lead exposure in refugee camps in Thailand in the past.
Home investigations in Omaha of Burmese children with EBLLs as high as 50 µg/dL have not revealed any other sources, such as housing built before 1978, cosmetics or spices.

Over the next two weeks, LPPB will deploy a team to Omaha with staff from the International Health and Refugee Branch, epidemiologists and other experts with extensive knowledge of the Burmese culture. Because the study of EBLLs among Burmese children has not yet been initiated, LPPB would welcome comments and suggestions from ACCLPP.

CDC entered into an agreement to replace its Systematic Tracking of Lead Levels and Remediation (STELLAR) case management database with the California Response and Surveillance System for Childhood Lead Exposure (RASSCLE) program. The agreement authorizes CDC to modify the STELLAR source code with RASSCLE. The national version of RASSCLE will provide state and local health departments with an additional tool to more easily institutionalize lead issues.

Mold, household injuries and other healthy housing data elements will be included in the national version of RASSCLE, but computer programmers are currently collaborating with internal and external partners to identify other fields to add. LPPB expects to release a demonstration of the program in November 2008 and deploy the national version of RASSCLE in May 2009. LPPB projects that the full transition from STELLAR to the national version of RASSCLE will require ~$2 million.

LPPB has not experienced drastic budget cuts, but a steady decrease of ~$1.5 million has been observed over the past two years. CDC advised LPPB to prepare two FY’09 budgets in anticipation of 10% and 25% cuts. LPPB projected that a 10% budget cut, or $3.5 million, would be equivalent to the resources required to support three state lead programs. The budget cuts have significantly decreased the ability of LPPB and state and local grantees to plan for future childhood lead poisoning prevention activities or establish long-term goals.

LPPB is continuing to lead CDC’s healthy housing initiative. CDC defined a “healthy house” as one that is sited, designed, built, renovated and maintained to support the health of its occupants. LPPB’s role in this effort is to focus on environmental health by modifying housing to improve health. CDC has no Congressional line item to conduct healthy housing activities, but LPPB leveraged funds from the Coordinating Center for Environmental Health and Injury Prevention and the Division of Environmental and Emergency Health Services to support a number of projects in this area.

LPPB conducted an environmental comparison of green and conventionally built housing. The overarching aim of the study was to obtain evidence-based knowledge of the benefits of green versus conventional buildings. LPPB realized that the association between green buildings and reduced allergens and toxic substances in the home has been solely based on traditional wisdom rather than solid evidence.

The cross-sectional study included two senior citizen housing complexes. The conventional complex was built ~15 years ago and the green complex was built in 2001. Data were collected for the study from interviews with residents and property managers, reviews of maintenance
records of the units and properties, visual assessments of individual units, and environmental sampling. The environmental sampling included vacuum dust sampling to collect allergens and fungi, isopropanol wetted gauzes to collect pesticides, and passive air diffusion badges to collect aldehydes and volatile organic chemicals (VOCs).

Allergens, VOCs and pesticides analyzed in the study included dust mites, cockroaches, rats, mice, formaldehyde, acetaldehyde, chlorpyrifos and cypermethrin. Dust mite allergens found in both types of buildings were below levels associated with symptoms or sensitization. Pesticides were not significantly lower in the green complex compared to the conventionally built complex. Overall, the study allowed LPPB to compile many lessons learned and pilot data collection techniques, laboratory and data analyses, and training procedures.

CDC and the U.S. Department of Housing and Urban Development (HUD) will use these results to launch a multi-site green study beginning in Boston in March or April 2009. CDC requested five-year funding from HUD to compare certain environmental, chemical and biological agents in green versus traditional, multi-family and low-income housing; ascertain differences in the health of residents in these homes; and assess the economic impacts of greening housing, particularly those related to health. Green buildings that do not include integrated pest management (IPM) will be excluded from the study.

Exposures of interest in the multi-site green study will include chemical and biological contaminants, pesticides, VOCs, fungi and indoor allergens. The outcomes of interest will include asthma morbidity of children, adverse birth outcomes and infant neurodevelopment. For example, the analysis of infant neurodevelopment in green housing will focus on IPM, low VOC materials, insulation and ventilation to determine whether these factors result in decreased VOCs, pesticides and other indoor chemicals.

The association between VOC and pesticide exposure and pre-term and low birth weight deliveries has been found to play a role in infant neurodevelopment. Residents will be relocated during the green and standard renovations of the properties. Interviews with residents and assessments of the properties will be conducted pre- and post-renovation. Data also will be collected one year after the properties have been rehabilitated.

LPPB is continuing its efforts to shift to a broader healthy housing focus. A name change to the “Lead Poisoning Prevention/Healthy Housing Branch” is being considered at this time. Cross-training in lead and healthy housing concepts is continuing to be offered in all LPPB training activities. Collaborations are underway with the U.S. Environmental Protection Agency (EPA) to develop a branding concept for healthy housing. LPPB project officers will become certified in healthy housing.

LPPB held a meeting in July 2008 with CDC-funded lead and healthy homes programs. The meeting provided grantees with an opportunity to describe their state and local experiences in making the transition from lead poisoning prevention to healthy housing. The most significant concern raised by the grantees was their inability to conduct healthy housing activities without authorizing legislation. However, the grantees were excited about the expanded and more holistic focus on healthy housing.
CDC, HUD, EPA and the U.S. Department of Agriculture (USDA) sponsored the “Building the Framework for Healthy Housing Conference” in September 2008 with ~1,400 participants. The four sponsoring agencies and the Office of the Surgeon General were well represented. Several interactive sessions were convened during the conference to allow participants to offer suggestions on advancing this effort.

CDC and the National Center for Healthy Housing (NCHH) convened an expert panel in December 2007 to discuss strategies to develop a healthy housing science base. The expert panel conducted an extensive literature review and provided guidance on effective or ineffective healthy housing interventions and those that need more field evaluation or basic research. The findings of the expert panel in five categories are outlined below.

For “interior biological agents (toxins)," the panel found sufficient evidence to support immediate implementation of multifaceted and tailored asthma interventions, IPM, allergen reduction and moisture intrusion elimination. Dehumidifiers, dry steam cleaning, vacuuming, air cleaners to reduce asthma, and general and local exhaust ventilation in kitchens and bathrooms were found to be promising interventions that need more field evaluation. Carpet treatments, education only, one-time professional cleaning and acaricides were found to need more formative research. Bedding encasements alone, sheet washing alone, upholstery cleaning alone and ozone air cleaners had insufficient evidence or were found to be ineffective.

For “interior chemical agents (toxics),” the panel found sufficient evidence to support immediate implementation of radon air mitigation through active sub-slab depressurization, IPM for pesticide reduction, residential smoking bans and lead hazard control measures. Radon mitigation in drinking water, portable HEPA air and vacuum cleaners to reduce particulates, attached garage sealing to limit VOC intrusion, and particulate control by envelope sealing were found to be promising interventions that need more field evaluation. Radon air mitigation with passive systems, occupant compliance with residential smoking bans, improved residential ventilation and VOC avoidance were found to need more formative research. Portable HEPA air cleaners to reduce environmental tobacco smoke and air cleaners that use or release ozone had insufficient evidence or were found to be ineffective.

For “drinking water, waste treatment and other external exposures,” the panel found sufficient evidence to support immediate implementation of voluntary drinking and wastewater treatment standards for small systems and private wells; training for small system personnel; and the development of guidelines for immunocompromised persons who use water that is not regulated by EPA. Ultraviolet and other filtration point-of-use systems, DNA to track pathogen sources, and the location of privies and failed drinking water and wastewater systems were found to be promising interventions that need more field evaluation.

Training for planners and zoning officials, radon mitigation in drinking water, and control of endocrine disruptors and pharmaceuticals in drinking water and wastewater were found to need more formative research. Research on ultraviolet and other filtration systems that currently comply with water standards was not found to be effective.
For “structural deficiencies” to prevent injuries, the panel found sufficient evidence to support immediate implementation of installation of working smoke and carbon monoxide alarms, isolation with four-sided pool fencing, hot water heaters with pre-set temperatures, and air conditioning during heat waves. Handrails, grab bars and improved lighting to prevent falls as well as home education on stair gates, window locks, window guards, and storage of matches and lighters with cabinet locks were found to be promising interventions that need more field evaluation.

The panel identified numerous structural deficiencies that need formative research, including ignition source controls, escape exit signage, temperature-controlled water faucets, improved smoke alarm designs, automatic fire sprinkler systems for housing, pool covers and alarms, better bathtub designs to reduce falls, improved stove control designs to prevent burns, prevention of carbon monoxide exposure through design and engineering, noise reduction behavior modification to escape fires, and improved enforcement of building and housing codes. Advice to elderly persons on fall prevention, giveaway smoke alarm programs and three-sided pool fencing had insufficient evidence or were found to be ineffective.

For the “intersection between housing and community,” the panel found sufficient evidence to support immediate implementation of the Section 8 program in reducing stress levels, asthma and exposure to violence. The “Moving to Opportunity” program was found to be a promising intervention that needs more field evaluation because poor outcomes were observed among boys in the program. Zoning and code development were found to need more formative research. The expert panel will complete the literature review on the intersection between housing and community.

CDC and its partners will conduct several activities to advance the development of a healthy housing science base. Collaborations will be established with stakeholders in housing construction, financing and housing code enforcement. Policy and advocacy groups will be convened to discuss financial levers that are available to foster effective interventions and research. The expert panel will continue to develop a white paper of its findings.

LPPB is participating in NCEH/ATSDR’s new initiative to define a national approach to protect the health and safety of Americans who use manufactured structures. NCEH/ATSDR is conducting the new project due to several factors. Uniform standards for manufactured homes, recreational vehicles, trailers, classrooms and offices are lacking. Scientific research is limited on the health consequences of persons who live, study, work or play in manufactured structures as well as the larger pool of individuals who could be affected. The use of manufactured structures has both direct and indirect effects following extreme weather events or other disasters.

Evidence has shown that travel trailers are more likely than site-built housing to have rodents, insects, indoor air pollution and mold. Moreover, travel trailers are also associated with mental health issues, injuries, poor infrastructure, proximity to waste sites, crowding and climate change. CDC drafted a paper on the manufactured housing project with chapters that cover structural integrity, adequate and safe utility services, fire safety, indoor air quality, community
settings, emergency issues, populations at special risk, emerging technologies, and moisture, mold and vector control.

CDC convened a meeting to obtain input on the draft paper from all key stakeholders, including federal and state government agencies, academic institutions, industry, advocacy groups and professional organizations. The next steps to advance the manufactured housing project will be to synthesize comments on the draft paper submitted by ~55 experts. The revised paper will be distributed to an External Steering Committee and released for a public comment period in the spring of 2009. The final paper will be published and launched in May or June 2009 after the completion of the government clearance process.

LPPB will release the “Transformation to Healthy Housing” notice of funding availability in January 2009, but grantees will be required to continue their emphasis on lead poisoning prevention. LPPB will award $600,000 to six lead programs that have an interest in making the transition to healthy housing programs. Applications must be submitted to CDC in April 2009 in order for LPPB to begin releasing funds in July 2009.

ACCLP commended LPPB on the magnitude and scope of the healthy housing activities that have been conducted since the previous meeting. Several members made suggestions and comments for LPPB to consider in two of its ongoing projects. First, LPPB should engage CDC’s Environmental Health Laboratory to evaluate commercial test kits to determine their efficacy in detecting contaminated well water.

Second, LPPB should make stronger efforts to engage state and local government agencies in the NCEH/ATSDR manufactured housing project. For example, LPPB should ask the National Association of County and City Health Officials, the Association of State and Territorial Health Officials, and the Council of State and Territorial Epidemiologists to widely distribute the draft paper to their respective memberships. LPPB also should use Dr. Benjamin Gitterman, ACCLPP’s liaison member for the American Public Health Association (APHA), to disseminate the paper to members in key sections of APHA.

Dr. Jessica Leighton, an ACCLPP member and chair of LPWG, provided a status report on LPWG’s activities following the March 2008 meeting. She noted that the most recent version of the draft Guidelines for the Identification and Management of Pregnant Women with Elevated Lead Levels was distributed to ACCLPP for review, discussion and input.

In general, Dr. Leighton asked for ACCLPP’s suggestions on making the paper shorter and more concise. In particular, she requested ACCLPP’s input on addressing six key issues of concern in the document.

One, the paper contains the following statement: “Recent epidemiologic cohort studies suggest that prenatal exposure, even with maternal BLLs <10 µg/dL, is inversely related to fetal growth
and neurobehavioral development independent of the effects of postnatal exposure. Exact mechanisms remain unclear.” LPWG has been divided on whether the available literature is adequate to make statements on the relationship between prenatal and postnatal exposure. ACCLPP’s input is needed on whether a summary table on neurobehavioral outcomes should be added to the paper.

Two, LPWG has not reached agreement on the definition of “EBLLs” or the meaning of “BLLs ≥ 5 µg/dL” during pregnancy. Some LPWG members did not support using “elevated” when referring to BLLs ≥ 5 µg/dL because this word is synonymous with “lead poisoned.”

Three, the paper contains the following screening recommendations: “In clinical settings where routine blood lead testing of pregnant women is not indicated, healthcare providers should consider the possibility of lead exposure in all pregnant women by evaluating community-specific and individual risk factors for exposure as part of a comprehensive occupational, environmental and lifestyle health risk assessment. Blood lead testing should be performed if a specific risk factor is identified.” Some LPWG members were uncomfortable with this guidance because healthcare providers might oppose routine blood lead testing.

Four, the paper contains the following general nutritional recommendations. “All pregnant and lactating women should eat a balanced diet in order to maintain adequate amounts of vitamins, nutrients and minerals. All pregnant and lactating women should be evaluated for the adequacy of their diets and be provided with appropriate nutritional advice and prenatal vitamins.

Adequate nutrition should be maintained throughout pregnancy and lactation and appropriate referrals made for women needing assistance to appropriate programs (such as the Women, Infants and Children Program or food stamps). All pregnant and lactating women should avoid the use of alcohol, cigarettes and herbal medicines.” LPWG reached agreement on all of these recommendations.

The paper contains the following nutritional recommendations for pregnant and lactating women with EBLLs. “In pregnant and lactating women with BLLs ≥ 5 µg/dL or with a history of EBLLs, dietary calcium intake of 2,000 milligrams daily should be maintained either through diet or in combination with supplementation. In pregnant and lactating women with BLLs ≥ 5 µg/dL or with a history of EBLLs, it is particularly important that iron status be evaluated and supplementation be provided in order to correct any iron deficiency.” LPWG acknowledged that this guidance is based on a small body of evidence.

Five, the paper contains the following recommendations for initiation of breastfeeding in women with EBLLs. “Initiation of breastfeeding should be encouraged for mothers with BLLs < 20 µg/dL since these levels are unlikely to be associated with a detectable increase in infant blood lead (based on the precision of clinical laboratory methods). However, in women with BLLs ≥ 5 µg/dL, an initial blood lead test is warranted to establish a baseline.

At maternal BLLs between 20-39 µg/dL, data do not exist to accurately weigh the risks of lead exposure from breast milk against the benefits of breastfeeding. Thus, the woman may initiate breastfeeding if sequential infant blood lead testing is performed to monitor trends (as indicated
A woman with a confirmed BLL $>40 \mu g/dL$ should not initiate breastfeeding. The woman should be advised that she may pump and discard her breast milk until her BLL has declined to $<40 \mu g/dL$.

After initiation of breastfeeding (as indicated above), breastfeeding may continue if infant BLLs are monitored. For breastfed infants whose BLLs are rising or fail to decline: (1) obtain a maternal blood lead test; (2) continue serial monitoring of infant BLLs (according to the schedule in Tables 5-3 and 5-4); (3) obtain an environmental source evaluation (according to Table 5-1); and (4) discontinue breastfeeding until maternal BLLs decline if no external environmental sources are identified and maternal BLLs are $>20 \mu g/dL$. LPPB acknowledged that concerns have been raised in the past when women with confirmed BLLs $\geq 40 \mu g/dL$ were advised against breastfeeding.

Six, LPWG has not identified target audiences of the paper or determined the level of information that is appropriate. LPWG has discussed the possibility of developing a second document that would be more targeted to practitioners. ACCLPP’s feedback is needed on whether specific chapters should be modified.

ACCLPP extensively discussed each of the six issues of concern in the lead and pregnancy paper. Dr. Brown clarified that a formal vote would not be needed at this time, but ACCLPP reached general agreement on actions LPWG should take to resolve these issues.

1. The language on neurobehavioral development should remain in the paper. The leading sentence of the statement, “recent epidemiologic cohort studies suggest,” is factual. A summary table on neurobehavioral outcomes should be developed and added as an appendix or a web link.

2. LPWG should develop new language or revise the “EBLL” recommendations to advise healthcare providers of the need for women to have BLLs $<5 \mu g/dL$ during pregnancy. The new language should point out that this level indicates exposure and women should be monitored as their pregnancies progress.

3. LPWG should obtain input on the screening recommendations from the American College of Obstetricians and Gynecologists (ACOG). Because ACOG guidelines are universally followed, ACOG’s thorough review and endorsement would increase the credibility of the paper and its implementation in the field.

4. ACCLPP did not offer specific suggestions for LPWG to revise the nutritional guidance.

5. The recommendations on monitoring maternal BLLs 20-39 $\mu g/dL$ while breastfeeding should be revised with more positive language: “Testing of the infant is encouraged to reassure mothers with BLLs 20-39 $\mu g/dL$ that breastfeeding is safe. However, breastfeeding with BLLs 20-39 $\mu g/dL$ is not believed to pose a risk to the infant.” Guidance on women with BLLs $<40 \mu g/dL$ should be separated from the breastfeeding recommendations.
6. ACCLPP members with outstanding concerns about any aspects of the paper should attend the next LPWG meeting on November 13-14, 2008 in New York City. After the paper is revised following the meeting, Ms. Anne Guthrie should be contracted as a writer/editor. Ms. Guthrie is a former ACCLPP member and has authored a number of ACCLPP papers. This approach should be implemented before efforts are devoted to making two separate documents from the paper. Ms. Guthrie’s independent review also might provide LPWG with more insight on appropriate target audiences and the level of information to include in the paper.

ACCLPP applauded the outstanding efforts and leadership of Drs. Leighton and Adrienne Ettinger, of the Harvard School of Public Health, for synthesizing numerous comments to revise the lead and pregnancy paper. Dr. Leighton asked ACCLPP to submit additional comments to Dr. Ettinger by October 31, 2008, particularly language on the definition of “EBLLs” and the meaning of “BLLs ≥5 µg/dL” during pregnancy as well as suggestions to enhance the nutritional recommendations.

**Public Comment Session**

Mr. Robb Morse, of ESA Biosciences, was pleased to announce that adoption of the LeadCare II system by private pediatricians has been extremely successful. However, use of this technology in the public health sector has been disappointing. Mr. Morse requested ACCLPP’s input on strategies to increase implementation of LeadCare II in the public health sector to broaden blood lead screening among target audiences.

Mr. Omar Shamin is the Health Manager for the Friends of Children and Families Head Start Program in Boise, Idaho. He reported that providers in Idaho, Montana, Oregon, Washington and other states are not providing lead screening to children in accordance with federal guidelines. At this time, only 10% of Medicaid-eligible children in Head Start Programs are being tested for lead in Idaho. Mr. Shamin asked ACCLPP to provide input on approaches that could be implemented to increase lead screening of children in the state.

Dr. Brown advised Mr. Shamin to encourage the Idaho Medicaid Director to adopt the Healthcare Effectiveness Data and Information Set (HEDIS) measure. She pointed out that beginning in January 2009, health maintenance organizations and individual providers who do or do not screen Medicaid-enrolled children will be a matter of public record.

Dr. Brown offered to provide Mr. Shamin with contact information of LPPB personnel who could assist in this effort. She also noted that the newly developed HEDIS measure for Medicaid-enrolled children would be presented and discussed during the ACCLPP meeting on the following day.

Mr. Craig Boreiko, of the International Lead Zinc Research Organization (ILZRO), pointed out that some of the recommendations in the lead and pregnancy paper were developed with an unclear understanding of the primary scientific literature on prenatal effects. He supported
ACCLPP’s previous suggestion for LPWG to conduct a meta-analysis of the evidence. He noted that the most recent meta-analyses strongly focus on postnatal exposure and minimize impacts from prenatal exposure.

With no further discussion or business brought before ACCLPP, Dr. Rhoads recessed the meeting at 5:16 p.m. on October 29, 2008.

Overview of the San Diego Childhood Lead Poisoning Prevention Program (CLPPP)

Dr. Rhoads reconvened the ACCLPP meeting at 9:05 a.m. on October 30, 2008 and yielded the floor to the first presenter.

Ms. Diane Rexin is the Program Manager of the San Diego County (SDC) CLPPP. She explained that San Diego is a 4,261 square-mile region in the southwest corner of California adjacent to the border of Mexico. SDC has the second largest population in California with ~3 million persons. The international border between San Ysidro, California and Tijuana, Mexico is the world’s busiest port of entry with >64 million border crossers each year.

Of all San Diego housing, 10% is pre-1950 and 64% is pre-1980 compared to 17% and 70%, respectively, statewide. Of all families with children in San Diego, 12.6% fall below the federal poverty level. Of all children <5 years of age in SDC, ~48% are Hispanic. SDC had the third highest number of EBLLs among children <6 years of age in 2007.

SDC’s lead testing regulations include Title 17 of the California Code of Regulations and the Refugee Health Assessment Program. SDC recently enforced the May 2000 Head Start Memorandum that requires written documentation of lead screening for all children who enroll in Head Start Programs. The city of San Diego passed an ordinance in May 2008 that requires state licensed child care facilities to provide proof of lead screening for all children 6 months to 7 years of age.

The SDC Health and Human Services Agency established the CLPPP in 1992 to provide case management services, healthcare provider education and fingerstick training, collaborative links with community and government partners, extensive community outreach, active surveillance and special projects. The CLPPP’s current resources include an annual budget of $878,974 and 6.3 full-time employees.

Examples of the CLPPP’s education and outreach activities include presentations and materials on lead poisoning to pregnant teens and school maintenance staff, collaborations with hardware stores, sessions on lead poisoning during English as second language classes, and education to healthcare providers. Moreover, outreach workers throughout SDC conduct health fairs and disseminate information to parents and guardians of small children.

The CLPPP provides case management as defined by the state of California: two BLLs 15-19 µg/dL drawn at least 30 days apart with the second level being venous and one BLL <20 µg/dL.
For non-state cases that are defined as one BLL 15-19.4 µg/dL, the CLPPP performs an environmental investigation of homes built prior to 1979. A public health nurse (PHN) and an environmental professional make joint home visits to provide case management services.

The CLPPP provided services to 1,005 children from 1992-2007. Of that total, the initiation of the Early Prevention Program in 2004 accounted for 243 children. CLPPP data of lead poisoned cases in SDC from 2000-2007 are summarized as follows. By age, children 0-2 years of age accounted for 61% of all cases and children 3-5 years of age accounted for 31%. By race/ethnicity, Hispanic children accounted for 77% of all cases. By geographic location, the Central, North Coastal and North Inland regions of SDC accounted for 75% of all cases.

By BLL, the majority of cases had BLLs 20-24 µg/dL. By housing, 55.8% of cases lived in rented homes and 42.7% lived in multiple units. By potential exposure sources, lead-based paint (LBP) accounted for ~25% of all cases. By travel history, ~90% of cases lived or traveled outside the United States in the previous year. Although 22.2% of cases reported traveling outside the United States in the previous month, the CLPPP believes this figure is an underestimate.

SDC’s proximity to the U.S.-Mexico border presents a number of challenges for the CLPPP. The potential for cultural-related exposures is more likely, such as cooking in clay pottery and using home remedies. The majority of cases reported to the CLPPP routinely eat Mexican candies. The need for bilingual PHNs, environmental health specialists and outreach workers is critical because most CLPPP clients speak Spanish only.

Because many clients frequently change residences between the United States and Mexico or within San Diego, cases are sometimes difficult to locate and result in an interruption in case management services. Some families reside in Mexico, but maintain an address in the United States. However, the CLPPP makes every effort to provide oral and written information to these families. Clients who routinely travel across the border during weekends, holidays and summer vacations are more likely to be re-exposed. The Occupational Lead Poisoning Prevention Program cannot address occupational exposures that occurred in Mexico.

Many families are undocumented and are hesitant to allow an environmental inspection due to a fear of eviction. San Diego’s growing Oaxacan population eats chapulines and has other specific exposures. Cultural objects frequently contain lead and are sold in small stores throughout San Diego or transported from Mexico in personal vehicles.

The CLPPP’s special projects are highlighted as follows. The CLPPP used the ArcGIS mapping program to identify census tracts in SDC where children <6 years of age were most at risk for lead poisoning based on age of housing, number of children <6 years of age, and number of children <6 years of age living below 150% poverty. The risk areas were defined as “very high,” “high,” “moderate” and “low.”

The CLPPP incorporated the ArcGIS data into its work plan. For example, the CLPPP established deliverables to conduct a minimum of 93 lead poisoning awareness activities in very
high-risk zip codes; a minimum of 56 events in targeted high-risk zip codes; and health fairs in very high and high-risk zip codes.

The goal of the Early Prevention Program (EPP) is to reduce BLLs and prevent children from becoming PHN-managed cases by providing education, identifying sources and performing visual assessments of homes. Children enrolled in the EPP have one venous BLL 10-14.4 µg/dL and receive home visits by community outreach specialists. EPP home visits include pre-printed educational messages, a flipchart as a visual teaching tool, and a visual assessment of homes built before 1979.

If deteriorated paint is identified during an EPP home visit, the home is referred for an environmental investigation with the family’s permission. Based on its geographic location, the home would be referred to the SDC Environmental Program, city of San Diego Lead Program or other cities with lead programs for possible remediation. Data from FY’05-FY’08 showed that of 162 EPP cases, 56% were retested. Of the 90 retested cases, 78% had lower BLLs <10 µg/dL and 11% were converted to PHN case management. The overall EPP results demonstrated a decrease in BLLs. The CLPPP will evaluate pre-2004 surveillance data of EBLLs 10-15 µg/dL without the EPP intervention.

The California Refugee Health Program recommends screening of children 12 months to 6 years of age within 30 days of arrival in the United States. Catholic Charities initially screen children in San Diego by fingerstick. If the results are <10 µg/dL, the child is retested in accordance with state guidelines. If the results are >10 µg/dL, the CLPPP PHN draws a venous BLL for confirmation.

Of 35 refugee children who received venous confirmation from 2004-2008, 43% required PHN case management, 14% required EPP services, and 43% had BLLs <10 µg/dL. Of the 15 PHN cases, 12 had lower BLLs <10 µg/dL and three cases are still receiving case management. All five of the EPP cases had lower BLLs <10 µg/dL and were removed from surveillance. Africa accounted for the majority of refugee children who received CLPPP services.

The CLPPP has identified several potential exposures for refugee children, including residence in deteriorated housing or a refugee camp in the country of origin, contaminated soil or water in the country of origin, proximity to a lead mine in Zambia, maternal pica behavior while breastfeeding, African chili seasoning with lead, eye makeup worn by a child, Middle Eastern candy and its wrapper, and welding, body shop work or other previous parental occupations.

Refugee children present a number of challenges for the CLPPP, including language barriers; the need for extensive coordination among refugee case workers, PHNs and families; difficulties in referring cases to healthcare providers; lack of transportation; an intense amount of time required by PHNs; and nutrition barriers, such as the reluctance of refugees to eat American foods and limited knowledge among refugees of good nutrition.

The CLPPP recently established collaborations with Head Start due to the requirement for children to provide proof of lead screening to enroll in the program. Head Start directors have
reported to the CLPPP that lead screening is the most difficult screening test to obtain. The CLPPP was also informed that some healthcare providers do not believe testing is necessary.

To address this problem, the CLPPP addressed a letter to healthcare providers and underscored the requirement for screening of all children enrolled in Head Start. The letter was signed by the SDC Public Health Officer and given to Head Start Programs. Families will give the letter to healthcare providers when their children present for the Head Start health screening and examination. The CLPPP is partnering with six SDC Public Health Centers to provide lead screening to children who do not have a healthcare provider or are encountering difficulties in obtaining lead screening. The CLPPP also plans to collaborate with Head Start directors to assess outcomes of the letter.

The CLPPP conducted a number of activities during Lead Week 2008. Lead screening was provided at no cost and resulted in the collection of 130 fingerstick specimens. Educational presentations and displays on lead poisoning prevention were provided to libraries and educators. The media covered a proclamation by the SDC Supervisor. A press conference was held for the CLPPP to demonstrate swab testing.

The CLPPP plans to conduct additional activities in the future. The CLPPP will partner with the Migrant Program in the school district to perform a needs assessment of migrant children in North County regions. The CLPPP will purchase a Lead Analyzer II to provide screening at no cost to children enrolled in Head Start Programs and other groups.

The CLPPP is interested in sending a letter to parents whose children have screening results of BLLs 5-10 µg/dL, but a number of issues must be addressed before undertaking this effort. The source of the specimen must be verified as a venous rather than a capillary lead level. Most code enforcement agencies in SDC have no interest in lead. Some healthcare providers might inform families to “disregard” BLLs 5-10 µg/dL.

ACCLPP commended the SDC CLPPP on its comprehensive program, particularly the development and implementation of innovative strategies to address specific challenges for Hispanic children who routinely travel between the United States and Mexico. Several members made suggestions for the CLPPP to consider in its ongoing and future activities.

- The CLPPP should place more emphasis on lead elimination and healthy housing. For example, the CLPPP should establish memoranda of understanding (MOU) with SDC housing agencies, HUD grantees, and Community Development Block Grant Programs.
- The CLPPP should increase its collaborations at the national level. For example, representatives of California and other states were appointed to chair the American Academy of Pediatrics (AAP) new section on early care and education. The Health Resources and Services Administration (HRSA) awards early childhood comprehensive system grants to states. The CLPPP should develop partnerships with HRSA grantees in California and other border states.
• The CLPPP should form relationships with programs or healthcare providers in Mexico through Binational Border Health Projects conducted by HHS at the federal level and California at the state level.

• The CLPPP should use its newly-established collaboration with Head Start to provide technical assistance to families with children enrolled in the program. The CLPPP also should use this partnership to engage the Migrant Head Start Program to reach migrant children.

**Overview of Alternate Strategies for Ensuring Lead-Safe Housing**

Ms. Samantha Harrykisson, of LPPB, described LPPB’s Lead-Safe Housing (LSH) Inventory Project. The purpose of the new project is to provide CLPPPs with information on non-HUD resources that are available for LSH and ensure housing subsidy programs are aware of their obligation to subsidize LSH. The overarching goal of the new project is to develop resources for housing agencies to use in responding to requests by CLPPPs for LSH.

To achieve the project goal, LPPB developed an inventory of non-HUD housing subsidies or low-income tax credits. The inventory includes representative affordable healthy housing programs and opportunities that were available between October 2007-August 2008. The inventory provides the name and target audience of the program; the location where the program is currently implemented or available; LSH criteria addressed by the program; a brief summary of and contact information for the program; and success stories of the program.

LPPB applied the following methodology to develop the inventory. The Internet was used to conduct initial research on affordable housing opportunities. Discussions were held with HUD, the National Association of Home Builders, community housing development organizations and other groups that are actively involved in affordable LSH issues. The Internet-based research and discussions with organizations led to the identification of 113 representative affordable housing programs or opportunities at federal, national, regional, state and local levels.

The initial research effort showed that many housing programs and opportunities had multiple funding sources, including contributions from public and private sectors, public-private partnerships, tax credit options and settlements. Because the initial research effort did not identify opportunities that received HUD funding, a more in-depth review of publicly-available resources was conducted to determine specific sources. Information was obtained from program summaries, rules and regulations, annual reports, application process documents, financial statements, telephone interviews and program success stories.

LPPB used Sections 1012 and 1013 of the HUD LSH Rule as the basis to assess the ability of each program to address LSH issues. The HUD LSH Rule requires inspections of all pre-1978 housing to determine the presence of LBP, risk assessments, implementation of interim controls, and clearance testing following any mitigation. LPPB also performed an evaluation to
determine whether programs included the LBP notification requirement, lead-safe work practices (LSWPs) during renovation, and policies for rehabilitation of existing properties.

The preliminary results of the inventory are summarized as follows. Of 113 programs reviewed for the inventory, public funding at federal and state levels and tax credits were the top two sources of funding to programs. Of 89 programs that received public funding, 84 received HUD funding or had some level of HUD involvement. Of all 113 programs, 51% received private funding and 12% were eligible for tax credits.

In terms of compliance with LSH requirements, ~60% of programs specified disclosure of known LBP or LBP hazards as a program requirement; <60% specified some level of inspection either for the presence of LBP or LBP hazards; ~50% specified paint stabilization, interim controls or LSWPs for mitigating LBP hazards or renovating housing units; and ~40% specified clearance testing following mitigation or remodeling activities.

The inventory demonstrated that not all affordable housing programs, even those receiving public funding, clearly specified LSH housing requirements in program information. LSH requirements at state and local levels are clearly stated, but were identified in <70% of the programs reviewed. Most notably, none of the public non-HUD funded programs, ~50% of tax credit programs, and <50% of HUD-funded programs or those with some level of HUD involvement specified LSH requirements.

Overall, community housing development organizations and state and local organizations that serve low-income families recognize and understand the basic requirements of LSH. However, strategies for organizations to share this information with communities are not uniform. These disparities underscore the value of the inventory in identifying gaps and opportunities to improve outreach.

Ms. Harrykisson presented a mock-up of the inventory that would be posted on the LPPB web site at the conclusion of the project. She clarified that the results of the inventory are preliminary at this time and would be refined as more information is gathered.

Mr. Larry Franklin, of LPPB, described the relationship between the Low Income Housing Tax Credit (LIHTC) Program and childhood lead poisoning prevention. LIHTC is a federal program for new low-income housing construction and rehabilitation. States received $500 million under the LIHTC (or $1.95 per person) in 2007, but also received additional leveraged funding.

Of 1.9 million units that have been rehabilitated or constructed since the establishment of the LIHTC in 1986, ~500,000 are older units being rehabilitated and are more likely to have lead paint. The Internal Revenue Service (IRS) oversees the LIHTC, but state housing agencies, individual and corporate investors, syndicators and developers also play a significant role in this process.

CDC commissioned the Alliance for Health Homes (AFHH) to conduct an extensive evaluation of the LIHTC. The key findings in AFHH’s report are summarized as follows. A wide disparity was observed among processes that states use to administer the LIHTC with regard to lead...
paint hazard controls. Of 52 qualified allocation plans (QAPs), only 15 explicitly address LBP. Of those, only four explicitly state that LBP hazards are required to be eliminated or controlled. This finding demonstrates that 75% of housing units being rehabilitated under the LIHTC do not have lead paint requirements, including state housing codes and HUD’s Uniform Physical Condition Standards (UPCS).

Private underwriting standards do not provide specific LBP requirements. Federal Housing Administration regulations cover lead paint, but only for multi-family mortgage insurance. Existing regulations have not been updated to address single-family homes. The HUD LSH Rule applies to states using the UPCS, but the IRS has not provided specific language for this requirement. States that do not choose to use the UPCS are not under an affirmative responsibility to follow any lead-safe procedures unless another federal, state or local authority requires compliance. The IRS has not issued any training materials on LSWPs.

In 2003, the IRS failed to execute a proposed MOU with HUD and USDA to clarify lead paint issues in the LIHTC. However, HUD and the U.S. Department of Treasury successfully executed an MOU and fair housing requirements are now included in all QAPs. IRS instructions to low-income housing credit agencies include language on health and safety hazards related to air quality, electrical hazards, garbage and debris, handrail hazards, pest management and LBP.

Based on a review of data collected from 1986-2006, 193,000 housing units were calculated to be at risk for lead paint. This calculation breaks down to 14,200 housing units that are at risk on an annual basis. Unless explicit requirements are incorporated into the LIHTC, no enforcement action can be taken to rehabilitate 14,000 old housing units with lead paint each year.

In an effort to address the LIHTC issues, LPPB and AFHH administered a four-question survey to the 42 CDC-funded CLPPPs: (1) How many projects are aware of the LIHTC? (2) Are the projects aware of QAPs? (3) Do these QAPs address lead? (4) What is the project's relationship with HUD representatives? The findings of the survey are outlined below.

In response to question 1, 23 CLPPPs were aware of the LIHTC; 13 were not aware of the LIHTC but conducted research to obtain information and initiate discussions with local housing officials; and six had no knowledge of the LIHTC. In response to questions 2 and 3, 18 CLPPPs were aware of QAPs and 24 were not aware of QAPs. Of the 18 CLPPPs that were aware of QAPs, nine had knowledge of the role of QAPs in addressing lead. In response to question 4, several CLPPPs had a limited relationship with HUD, but no direct interaction.

Based on the survey results, LPPB and AFHH developed a number of recommendations. Communication should be improved with state and local housing agencies and between HUD and CLPPPs. Education and awareness should be strengthened with CLPPPs to promote the availability of the LIHTC to property owners, particularly those who serve low-income eligible populations.

A template should be developed to incorporate standard lead poisoning prevention language into all QAPs. Federal rules should be clarified to include lead as a requirement in all QAPs.
HUD, CDC, the IRS and USDA Rural Housing Service should execute an MOU to clarify lead requirements in LIHTC properties.

After administering the initial survey, LPPB and AFHH asked the 42 CDC-funded CLPPPs to answer two additional questions: (1) What are the next steps regarding the inclusion of lead elements in future QAPs in your project? (2) When will the QAP be drafted and finalized for the upcoming year?

Of 24 CLPPPs that responded to the follow-up survey, 22 perform annual reviews of QAPs and two review QAPs every two years. The follow-up survey demonstrated the need to improve communication and interaction between state housing agencies and CLPPPs and also to engage HUD, EPA, the IRS and other federal partners.

Based on the follow-up survey results, LPPB and AFHH developed several recommendations. CLPPPs should improve communication by inviting state housing agencies, HUD and EPA to participate in existing coalitions and strategic advisory committees. The involvement of other federal agencies in partnerships should be encouraged and local language should be developed. CLPPPs and housing agencies should collaborate to review and modify QAPs on an annual basis.

Model language for QAPs should be developed to address the need, prioritize activities based on a point award system, and explicitly state the lead paint requirement. AFHH has taken an initial step to achieve this recommendation by proposing model language for QAPs. Due to the transition to healthy homes, consideration should be given to including incentives for healthy housing issues in QAPs. This recommendation could be easily achieved because some QAPs already award points for green rehabilitation and construction.

ACCLPP commended LPPB for developing the LSH inventory and collaborating with AFHH to develop model language for the LIHTC. Several members pointed out that these tools would be extremely helpful to CLPPPs in making the transition to healthy housing programs.

A number of ACCLPP members made comments and suggestions for LPPB to consider in enhancing the LSH activities.

- A nuanced approach should be taken in applying the LSH Rule to LIHTC properties. For example, risk assessments and paint inspections should not be required for extensive rehabilitations in which the property is essentially “gutted.” These funds would be more useful for lead hazard control in conjunction with rehabilitation or properties with moderate rehabilitation.
- The proposed model language for the LIHTC should reference the seven states that use QAPs to award points for green communities. The three states that use green communities as the basis to award extra points should be noted as well.
- The proposed model language for the LIHTC has a narrow focus and does not fully capture the spirit of the healthy homes movement. Broader and more holistic language
covering spray-free, smoke-free and LBP elimination policies would be better received and endorsed by developers and syndicators of tax credits.

- LPPB should require grantees to submit evidence of collaborations with state housing agencies in the next cycle of the cooperative agreement.

Dr. Warren Friedman, ACCLPP’s *ex-officio* member for HUD, announced that HUD submitted a request for the IRS to issue guidance on the linkage between the LSH Rule and LIHTC in May 2008. Dr. Brown asked ACCLPP to thoroughly review the proposed model language for the LIHTC and submit additional comments to her by e-mail.

### Update by the U.S. Consumer Product Safety Commission (CPSC)

Ms. Lori Saltzman, ACCLPP’s *ex-officio* member for CPSC, explained that Congress established CPSC in 1973 as an independent federal regulatory agency to reduce unreasonable risks of injury from consumer products. CPSC’s jurisdiction includes thousands of different types of products that are sold to consumers for personal use in or around the household or school. However, CPSC has no authority over cars, airplanes, foods, medical devices, tobacco or pesticides.

The Consumer Product Safety Improvement Act (CPSIA) of 2008 was enacted into law on August 14, 2008 and expanded CPSC’s authority to cover a wider range of products. The CPSIA establishes product standards and other safety requirements for children’s products and also reauthorizes and modernizes CPSC.

The CPSIA provisions related to the safety of children’s products are highlighted as follows. Children’s products are subject to strict new limits on lead paint and lead content. Manufacturers must certify compliance before importing and distributing children’s products. Certification of children’s products must be based on testing by an accredited third-party laboratory. Beginning in August 2009, manufacturers must place identifying marks on children’s products and their packaging. Manufacturers must provide postage-paid registration cards for durable nursery products and follow other new mandatory standards.

New toy standards will become effective in six months. At that time, the American Society for Testing and Materials voluntary standard will become a CPSC standard. CPSC will have authority to evaluate the need for stronger standards for children’s toys that contain magnets, cords, straps and elastics, batteries and other components. Beginning in February 2009, the sale of certain children’s products containing one or more of three phthalates will be prohibited. Three additional phthalates are temporarily banned in children’s products pending further study.

Other provisions of the CPSIA are summarized as follows. A searchable product safety web-based database will be established subject to appropriations and will allow the public to submit and view product incident reports online. The sale, manufacture, importation or distribution of a recalled product or a product that does not conform to any applicable safety rule is prohibited.
Civil penalties will increase to $15 million and criminal penalties for violations may include imprisonment, fines and forfeiture of assets one year after enactment. Private employees will not be discriminated for providing CPSC with information on violations.

The manufacture and sale of new three-wheeled all-terrain vehicles (ATVs) is prohibited. ATVs must comply with the new mandatory standard and manufacturers must reach agreement with CPSC on training, advertising and other issues regarding ATVs. This provision will become effective ~240 days after enactment of the CPSIA.

The CPSIA defines a “children’s product” as a consumer product primarily designed or intended for children <12 years of age. CPSC will consider the manufacturer’s statement about the intended use, packaging, display, promotion or advertising of a children’s product as well as the Age Determination Guidelines of 2002 to make determinations regarding children <12 years of age.

Section 101 of the CPSIA contains provisions for children’s products containing lead. The language seeks to reduce the amount of lead in children’s products to the lowest level that technology will allow. Limits on the amount of lead will be phased in over three years. Beginning on February 10, 2009, the total lead content by weight for any part of a children’s product will be 600 ppm. Beginning on August 14, 2009, the lead limit will be 300 ppm total. Beginning on August 14, 2011, the lead limit will be 100 ppm total unless CPSC determines that this limit is not technologically feasible after a notice and hearing.

CPSC will periodically review and revise the lead limits based on several factors. Technological feasibility will be determined (1) if a product that complies is available in the product category; (2) if the technology to comply is commercially available; (3) if industry is capable of achieving the limit by the effective date; and (4) alternative practices would allow compliance.

Some children’s products may be exempted from Section 101 if CPSC, after notice and public comment, determines that lead would not result in any absorption. These exclusions would take into account normal and reasonably foreseeable use and abuse by children. Moreover, excluded products could not cause any other adverse impacts on the health and safety of children.

CPSC may generally exclude component parts if such parts are not accessible to a child through normal and reasonably foreseeable use and abuse. The provision defines “not accessible” as component parts that are not physically exposed due to a sealed covering or case and do not become exposed through reasonably foreseeable use and abuse. Paint, coatings, or electroplating cannot be considered as a barrier to rendering lead in the substrate inaccessible.

On August 14, 2009, CPSC will issue a guidance rule on product components or classes of components that will be considered inaccessible. Any children’s product that contains more lead than the established lead limits will be a banned hazardous substance under the Federal Hazardous Substances Act.
If CPSC determines that the ability of certain electronic devices, including those with batteries, to meet lower lead limits is not technologically feasible, two types of regulations will be issued: (1) requirements to eliminate or reduce potential exposure and accessibility and (2) a schedule for achieving full compliance unless CPSC determines full compliance is not possible on an established schedule. Periodic review of lead limits in electronic devices will occur no less than every five years.

Section 101 of the CPSIA also contains provisions for the lead paint ban. Beginning on August 14, 2009, paint and similar surface coatings for consumer use must be reduced from 0.06% to 0.009%. Paint with more than 0.009% of the weight of the total non-volatile content of paint or the weight of dried paint film will be banned as a hazardous substance under the Consumer Product Safety Act. Periodic review and possible revision of paint levels will occur no less than every five years.

CPSC can rely on X-ray fluorescence (XRF) or other alternative methods for screening, but not certification of paint. By August 14, 2009, CPSC must complete a study on the effectiveness of XRF or alternative methods in testing paint. Periodic review of test methods will occur no less than every five years.

CPSC developed the following timeline for laboratories to establish accreditation requirements for testing of consumer products under CPSIA: December 2008 for children’s metal jewelry; May 2009 for the 300 ppm lead limit in children’s products; and May 2011 for the 100 ppm lead limit in children’s products if feasible. The accreditation requirement for laboratories to test lead paint was published in the Federal Register in September 2008.

Ms. Saltzman informed ACCLPP that on November 6, 2008, CPSC will hold a public meeting to obtain feedback from stakeholders on the CPSIA exclusions regarding inaccessible component parts and electronic devices. To inform its XRF study, CPSC will solicit input from experts on November 7, 2008 regarding the use of XRF as a screening tool to detect lead in paint and surface coatings. The registration deadline to attend the public meeting and expert hearing in person has closed, but both events will continue to be open to the public via webcast. Information on the webcasts can be obtained from the CPSC web site at www.cpsc.gov.

Ms. Saltzman announced that the CPSC web site contains additional information on the CPSIA, including notices of public meetings and answers to frequently asked questions. The web site also provides an opportunity for stakeholders to provide input or request clarification on any aspects of the CPSIA.

Update by the Lead in Consumer Products Workgroup

Dr. Michael Kosnett, an ACCLPP member and chair of the Workgroup, provided a status report on the Workgroup’s activities following the May 2008 meeting. The Workgroup drafted a letter to Dr. Julie Gerberding, Director of CDC, and recommended a ban against the exportation of recalled toys from the United States to other countries.
After ACCLPP’s letter was placed in the public domain on the CDC web site in May 2008, the House and Senate passed an amended version of the CPSIA that was signed into law. The final legislation stated that the exportation of recalled consumer products from the United States would be unlawful and children’s toys containing lead above 100 ppm would be considered a banned hazardous substance.

ACCLPP’s letter also advised CDC to take leadership in leveraging funds to convene an international conference on lead in consumer products with representatives from China and developing countries. The Workgroup acknowledged that the international conference would play an important role in building worldwide consensus and raising global awareness of this issue.

To advance this initiative, the Workgroup drafted a proposal to convene the international conference in Beijing, China in the spring of 2010 and address four major categories:

1. Health effects of low to moderate levels of lead exposure, including special emphasis sessions on pediatric and adult lead poisoning.
2. Advances in lead poisoning prevention programs, such as pediatric and occupational exposure registries, health surveillance systems, screening programs, preventive educational programs and case management.
3. Advances in public health laboratory infrastructure and lead quality testing assurance.
4. Primary prevention of lead poisoning through the use of safe alternatives, such as non-lead pigment regulations and voluntary certification programs.

Dr. Kosnett pointed out that the Workgroup’s proposal for the international conference was distributed to ACCLPP for review. If ACCLPP agreed with the proposal, he confirmed that the Workgroup would initiate discussions with colleagues in China and funding entities to convene the international conference. Regardless of the outcome, however, Dr. Kosnett thanked CDC for its support and willingness to explore strategies to hold the international conference.

Dr. Kosnett emphasized that the Workgroup would welcome the opportunity to collaborate with CPSC as the CPSIA is enacted and enforced in the future. He raised the possibility of appointing a Workgroup member to serve as a formal liaison to CPSC during these efforts. He invited other ACCLPP members, liaisons and ex-officios to join the Workgroup.

ACCLPP applauded Dr. Kosnett and the Workgroup members and consultants for their outstanding efforts in drafting the letter that played a significant role in the enactment of the CPSIA amendments. ACCLPP also commended the Workgroup for developing an extremely well-written proposal to convene the international conference.

Several ACCLPP members made comments and suggestions to advance the ongoing effort to address lead in consumer products.
• ACCLPP should use the enactment of the CPSIA to develop and distribute a white paper on eliminating lead exposure or reducing lead to the lowest level possible. The paper that AFHH is currently developing on this issue should be used as a starting point in this effort.

• CPSC should use the expertise of California's interagency XRF User's Group to inform its XRF study.

• CLPPPs will incur expenses in the field while collecting and analyzing samples to comply with the CPSIA lead paint ban and other provisions. CDC should ensure that CLPPPs have adequate funding to implement the new law. For example, the CDC cooperative agreement should include additional funding to motivate CLPPPs to adhere to the CPSIA provisions.

• CDC should use the enactment of the CPSIA to encourage EPA to reduce the current standard for LBP housing or LBP-free housing from 0.5% to a lower level. A lower LBP level in EPA's Renovation, Repair and Painting Rule would capture sanding and other rehabilitation activities and also would be more protective of health.

In terms of the Workgroup’s proposal on the international conference, Dr. Brown emphasized the need to consult with Dr. Thomas Sinks, Deputy Director of NCEH/ATSDR, to discuss the feasibility of convening this event. On the one hand, she emphasized that LPPB is not in a position to fund international lead poisoning prevention activities at this time. On the other hand, she noted that LPPB could approach the CDC Foundation and seek other opportunities within CDC to sponsor the international conference. She encouraged the Workgroup to continue its efforts in identifying external funding sources.

In response to Dr. Kosnett’s specific question, Dr. Brown confirmed that she would determine whether ACCLPP could issue an official advisory committee statement to formally acknowledge the enactment of the CPSIA amendments into law.

Overview of the Lead Screening in Children HEDIS Measure

Ms. Paula Staley, of LPPB, reported that the HEDIS measure for lead screening in children is a critical need because the 1999 report by the U.S. Government Accountability Office indicated only 18% of children at highest risk were being screened. Although the rate dramatically increased to 42% based on the 1999-2002 National Health and Nutrition Examination Survey, less than 50% of children at highest risk were being screened at that time. Moreover, agreements for lead programs to share data with Medicaid have had variable success.

In addition to increasing the low screening rate of high-risk children, CDC also acknowledged that a lead screening measure would facilitate reporting of standardized and comparable data, institutionalize blood lead testing for high-risk populations, and establish performance goals with financial incentives. The new HEDIS measure for lead screening in children was recently approved and will be publicly reported beginning in 2009.
Ms. Donna Pillittere Dugan, Director of Performance Measurement at the National Committee for Quality Assurance (NCQA), explained that NCQA was established in 1990 as a private, independent and non-profit healthcare quality oversight organization. NCQA convenes diverse groups of stakeholders to achieve a common goal of improving healthcare quality through measurement, transparency and accountability.

NCQA’s most significant milestones are highlighted as follows. At this time, three of every four Americans are enrolled in an NCQA-accredited health maintenance organization. Of all managed care organizations, >90% report HEDIS quality data to NCQA. The number of preferred provider organizations that submitted HEDIS data to NCQA increased from 80 in 2005 to 141 in 2007. NCQA Recognition Programs recognize 10,000 physicians in various specialties. The federal government and 38 states rely on NCQA accreditation. HEDIS is a registered trademark of NCQA.

NCQA’s focus on healthcare quality improvement is in response to high healthcare costs, widely variable healthcare quality, and payment incentives that typically support poor care. Moreover, healthcare organizations should be expected to provide an infrastructure to deliver high quality care and services and increase the likelihood of desired health outcomes that are consistent with current professional knowledge. NCQA also focuses on prevention and a value-based healthcare system because only 20% of persons generate 80% of healthcare costs.

HEDIS is structured with >70 process and outcome measures and a standardized member satisfaction survey. Commercial, Medicare and Medicaid plans voluntarily submit HEDIS data to NCQA, but some states and private employers mandate reporting of HEDIS data for accreditation and other purposes.

NCQA develops a HEDIS measure based on its relevance, scientific soundness and feasibility. NCQA defines a “guideline” as advice that ideally establishes goals for care processes and outcomes based on the best available evidence. NCQA defines a “measure” as a reliable and valid quantification of results that actually can be achieved relative to others. However, the progression from a guideline to a measure is not assured.

NCQA’s history of measuring data in immunization, diabetes, cardiovascular disease and other areas has demonstrated that measurement leads to improvement and ultimately saves lives. The three components of HEDIS measures include a description of the specific measure, the denominator or the total eligible population, and the rate or the numerator of the eligible population.

On average, a new HEDIS measure requires 1-3 years from development, implementation in the field and public reporting. Expert panels of clinicians, researchers, NCQA auditors, health plans and other subject matter experts are convened to discuss the feasibility of developing a proposed measure based on existing guidelines. NCQA creates a rationale document for the proposed measure, drafts specifications and builds consensus with expert panels. The proposed measure is tested in the field and released for public comment. The measure is implemented nationally for one year and then publicly reported after data are collected. However, health plans with less than 30 members are not allowed to publicly report data.
CDC and NCQA began collaborating in 2004 to develop a HEDIS measure for lead screening of children. A lead screening expert panel was convened to describe the background and highlight the importance of the lead screening measure. Key observations by the expert panel are outlined as follows. The majority of children with EBLLs are eligible for Medicaid. CDC and AAP recommend screening of Medicaid-eligible children.

The Centers for Medicare and Medicaid Services (CMS) requires lead screening for children enrolled in Medicaid and State Children’s Health Insurance Programs. Most states mandate lead screening and many states have strategic elimination plans. The lead screening measure would support the national goal to eliminate lead poisoning by 2010 by encouraging screening and the use of standardized data. Standardized data would help to improve comparability.

An early draft of the lead screening measure called for the calculation of two separate rates of the percentage of children 2 years of age who received >1 venous blood tests on or before their second birthday. Rate 1 was one capillary or venous blood test on or before the child’s second birthday, while rate 2 was two capillary or venous blood tests on or before the child’s second birthday at least one of which would occur between month 12 and 24.

All HEDIS measures are collected from administrative or claims data, medical records or Consumer Assessment of Health Plans Survey data. However, NCQA acknowledged the need to create a hybrid measure for the lead screening measure in which most data would be collected from current procedural terminology codes and the remaining data would be collected from chart reviews. NCQA also opted to collect Medicaid data only and utilize the same medical record sample as the existing childhood immunization status measure.

Based on this methodology, the lead screening measure was field tested with six volunteer health plans. The field test results are summarized as follows. The eligible population was sufficient for health plans to report the lead screening measure. For rate 1, plan performance was 54.3% with hybrid data and 46.3% with administrative-only data. Plan performance was only 10% for rate 2.

Three health plans showed no statistically significant differences between genders in the first screening of children with administrative-only data. The majority of children screened were 13-18 months of age with administrative-only data. Six health plans detected BLLs >10 µg/dL in 17 children with medical record data. On average, plans had better performance of ~9%-10% with chart reviews.

After the field test, the lead screening measure with rates 1 and 2 was released for public comment. Most of the 40 respondents were in favor of NCQA moving forward with the lead screening measure, but concerns were raised about the timing of the numerator requirements for rate 2. The respondents noted that the timing was inconsistent with clinical practice and did not provide a buffer as seen in state measures.

To address this concern, NCQA agreed to only calculate rate 1 as a starting point. As a result, the new lead screening measure is the percentage of children 2 years of age who had one or
more capillary or venous lead blood tests by their second birthday. The lead screening hybrid measure will be aligned with and use the same medical records as the childhood immunization status measure. Medicaid plans will be allowed to concentrate on ensuring at least one blood lead screening by 2 years of age.

The lead screening measure was formally approved as a first-year measure after the public comment period. First-year measures are published in the annual HEDIS volume document, but are not linked to health plan performance. NCQA also uses first-year measures to collect and analyze data; identify flaws, unexpected or implausible results in the measure specifications or data collection; and respond to additional comments or questions submitted by health plans or auditors.

Key findings from the first-year lead screening measure are summarized as follows. Of 176 Medicaid HEDIS submissions, ~61% reported a valid rate and ~39% did not report a valid rate due to a small denominator of <30 members or unspecified reasons. The median eligible population across all plans was 1,921 children enrolled in Medicaid. At the national level, a mean of ~61% of the eligible population received at least one lead screening by their second birthday with a range of ~32.3%-84%. At the regional level, New England plans had the highest performance, while Mountain region plans had the lowest performance.

Plans collected hybrid data at a rate of 63.3% compared to administrative-only data at a rate of 52.6%. In terms of the collection of both hybrid and administrative-only data, plan performance was 6.3%-9% higher in the first year than during the field test. In a state comparison of the mean Medicaid rate, first-year data from the lead screening measure showed a rate of 61.4%, while 2005 data from the New York State Quality Assurance Reporting Requirements showed a rate of 86%.

Ms. Dugan was pleased to announce that the NCQA Committee on Performance Measure voted to move the measure to public reporting for HEDIS in 2009. Because the publication was released in July 2008, NCQA will receive the first data set from the lead screening measure in June 2009 that will be linked to plan performance.

ACCLPP was extremely pleased that the lead screening HEDIS measure was approved for public reporting beginning in 2009. The members made two key suggestions for CDC and NCQA to consider.

First, CDC should survey CLPPPs to identify states that plan to use the new HEDIS measure as a financial incentive strategy. CDC should monitor and track the success of these efforts over time. Second, NCQA should conduct research to determine the number of children who do not meet any enrollment criteria across HEDIS measures and are not being captured.
Dr. Sher Lynn Gardner, an ACCLPP member and chair of the ESWG, reported on ESWG’s activities following the March 2008 meeting. ESWG is charged with identifying appropriate educational interventions for children with EBLLs; determining whether these interventions should be different from those for children with neurodevelopmental or cognitive delays; and deciding if children with EBLLs should be screened earlier. ESWG has convened one meeting to date to clarify its charge.

To fulfill its charge, ESWG will identify and compile existing evidence to show that children with EBLLs who receive early interventions have improved academic outcomes. ESWG also will specify interventions that need to be implemented by parents, educators and healthcare providers. ESWG will use Chapter 5 of CDC’s *EBLL Manual* as a starting point to guide its discussions. ESWG will provide regular updates to ACCLPP and present its findings on educational support for children with EBLLs to ACCLPP for review and formal approval.

Dr. Vivian Cross is the Executive Director of the Foundation for Educational Advancement, Inc. of Connecticut and an ESWG member. She explained that educational support for children with EBLLs is a critical need. Lead-poisoned children who are impaired are repeatedly chelated, but are never captured in the Individual with Disabilities Act (IDEA) system. Moreover, these children are eligible for IDEA benefits, but typically do not receive these services.

IDEA is a federal grant program that assists states in operating a comprehensive statewide program of early intervention services for infants and toddlers 0-2 years of age and their families. Dr. Cross thanked ACCLPP for approving the formation of ESWG. She pointed out that this important effort would play a significant role in advancing the implementation of IDEA Parts B and C to address the needs of children who are impaired due to lead poisoning.

Dr. Brown and Ms. Connie Thomas, of LPPB, announced that clinicians, researchers and parents serve on ESWG. The members have expertise in multiple disciplines, including lead exposure, education, special education, health education, community building, public policy design, IDEA and neurodevelopmental effects of lead. Efforts are underway to recruit two additional ESWG members: a representative of the National Head Start Program and a legal expert in the Department of Education.

Ms. Thomas informed ACCLPP that LPPB asked all CLPPPs to review their current state laws and determine whether these regulations could be used to address the educational needs of lead-poisoned children who are impaired. LPPB also asked the CLPPPs to determine whether lead is specifically mentioned in their state laws as a condition that warrants any type of special intervention at Head Start and school ages. ESWG will use the CLPPP data to avoid duplicating existing educational interventions.

ACCLPP fully supported ESWG’s approach of compiling data from CLPPPs to identify existing educational interventions that could be tailored and adopted. The members made three key suggestions for ESWG to consider in its ongoing activities.
• Data on educational interventions should be collected from Connecticut and New York City. Drs. Cross and Leighton, respectively, should facilitate these efforts for ESWG.
• Chicago’s existing model of pooling data from different data sets should be reviewed. Ms. Anne Evens, of the University of Illinois, Chicago School of Public Health, should facilitate this effort for ESWG.
• Parents of lead-poisoned children who have navigated the educational system should be recruited to serve on ESWG. Ms. Kite will provide Dr. Gardner with contact information of two parents.

ACCLPP Business Session

Three ACCLPP members volunteered to serve as new workgroup members. Dr. Charlton will serve on the Lead in Consumer Products Workgroup and Ms. Kite and Dr. Reyes will serve on the Education Support Workgroup.

Dr. Brown announced that the terms of some ACCLPP members would expire after the March 2009 meeting. She asked ACCLPP to provide her with names of potential candidates, particularly males, as quickly as possible because nominations must be submitted on November 1, 2008. The CDC Committee Management Office informed Dr. Brown that ACCLPP is not balanced in terms of gender. Dr. Brown also announced that efforts are underway to extend Dr. Leighton’s term for an additional year because LPWG has not yet completed the lead in pregnancy paper.

Dr. Brown provided an update on activities to address lead in AstroTurf in response to ACCLPP’s request for this information. CDC held a series of meetings with EPA, CPSC and the Synthetic Turf Council. Lead screening was performed on children who used an AstroTurf field in Newark, New Jersey each day. The mean BLLs of these children were consistently lower than those of other children in Newark.

In reviewing other data, CDC was unable to detect a relationship between adverse health effects from lead and AstroTurf. However, CDC made recommendations for children who play on old AstroTurf fields to frequently wash their hands and avoid eating on these fields. CDC also advised parents not to allow children <6 years of age to play on old fields. Dr. Brown explained that ATSDR and the CDC National Center for Injury Prevention and Control are now addressing AstroTurf as injury and toxic substances issues.

The future agenda items ACCLPP discussed over the course of the meeting are noted below for the record:

• ACCLPP discussion on strategies to inform local agencies of federal, state and international programs that address case management, source identification and other issues of relevance to childhood lead poisoning prevention and healthy housing.
- ACCLPP discussion on state and local laws regarding lead in consumer products and situations in which CPSC mandates would preempt state and local laws.
- ACCLPP discussion on strategies to recruit international liaisons from CPSC, the Food and Drug Administration, the interagency Import Safety Workgroup led by HHS, the CDC Office of Global Health, and the HHS and California Binational Border Health Projects.
- ACCLPP discussion on the possibility of CLPPPs performing risk assessments of lead in windows, doors and other housing components purchased from Habitat for Humanity and other salvage stores. Lead poisoning cases from the sale of salvaged housing products have been reported in Indiana and New Jersey.

### Public Comment Session

**Mr. Craig Boreiko**, of ILZRO, informed ACCLPP that the Environment Ministry of Denmark has compiled an extensive body of literature on the relationship between hunting and lead exposure. He offered to provide these web links to ACCLPP.

Mr. Boreiko also pointed out that the *Federal Register* notice listed the “study design of health effects of BLLs <10 µg/dL” as an ACCLPP agenda item. However, this topic was not discussed during the meeting.

Dr. Brown clarified that the *Federal Register* notice was incomplete. The full agenda item was “BLLs <10 µg/dL specific to the issue of lead in pregnancy.” This topic was presented by the Lead and Pregnancy Workgroup and extensively discussed by ACCLPP on the previous day.

**Ms. Karleen Lloyd** is a parent of a lead-poisoned child. She explained that in 1987, the California Department of Health Services (CDHS) performed lead screening and measured lead levels in children from blood, household paint and soil samples in Northern, Southern and Central California. CDHS conducted lead screening in Alameda, Los Angeles and Sacramento Counties based on the high percentage of pre-1950 houses and the strong likelihood of lead paint in homes in these locations. The sample showed that 14%-67% of children who lived in the three target areas had BLLs >10 µg/dL.

Ms. Lloyd conveyed that her child was diagnosed as lead poisoned with a BLL <15 µg/dL. However, CDHS informed Ms. Lloyd in a letter that no further action would be taken because her child’s BLL was below the level required for intervention. Ms. Lloyd subsequently joined People United for a Better Oakland and other advocacy groups that were instrumental in shaping a framework for Alameda County and the California lead program. These organizations also played an important role in emphasizing the critical need to test children with low BLLs.

Ms. Lloyd informed ACCLPP of her deep concerns regarding the current trends in lead policies and regulations. Her position was that the national goal to eliminate childhood lead poisoning by 2010 has become convoluted because stakeholders involved in this effort have different motives or agendas and funding to achieve this goal has dramatically decreased over time.
Ms. Lloyd was also concerned that some documents could cause a disservice to lead-poisoned children or result in non-prevention outcomes. She cited CDC’s *Strategy of Enhanced Children’s Positive Developmental Outcomes* as an example of her concern: “Although lead is a risk factor for developmental and behavioral problems, its presence does not indicate that these problems will necessarily occur.”

Ms. Lloyd believed that CDC’s statement was loosely written and could be misinterpreted to mean lead-poisoned children do not need interventions or other services. The language also could be misinterpreted to mean that lead is not a problem. She noted that no scientific evidence has been gathered to date to indicate damage caused by lead would be reversible.

Ms. Lloyd underscored the need for clear and concise language in lead policies and regulations because parents of lead-poisoned children need assistance from health, governmental and educational entities. She informed ACCLPP that the advocacy community has expressed concerns regarding CDC’s updated *Blue Book* in which “preventability,” “curability” and “reversibility” might be removed from the document.

Drs. Rhoads and Gardner confirmed that many ACCLPP members share Ms. Lloyd’s concerns. They hoped Ms. Lloyd’s attendance at the meeting provided some level of assurance of ACCLPP’s ongoing activities to address outstanding issues and decrease children’s exposure to lead. For example, ACCLPP’s Education Support Workgroup is charged with strengthening knowledge and understanding at the national level of educational interventions that need to be targeted to children with EBLLs.

Dr. Rhoads urged Ms. Lloyd to highlight CDC documents that are causing significant concern in the advocacy community. He confirmed that ACCLPP would welcome the opportunity to review the language in these documents at a future meeting.

Dr. Cross added that the Education Support Workgroup plans to thoroughly review CDC’s 2002 *Blue Book* because some of the research references cited in the document are based on studies conducted 7-65 years ago. She emphasized the need to update the *Blue Book* to reflect more recent data and the needs of parents of lead-poisoned children. Most notably, responses to a parent survey that was recently distributed across the country demonstrate the absence of a system for parents of lead-poisoned children to obtain educational assistance.

**Closing Session**

The participants joined Dr. Rhoads in applauding Mr. Barry Brooks, Ms. Claudine Johnson, and other CDC staff and contractors for providing outstanding administrative support and making logistical arrangements for the ACCLPP meeting. The next ACCLPP meeting would be held in Atlanta, Georgia on March 10-11, 2009.
With no further discussion or business brought before ACCLPP, Dr. Rhoads adjourned the meeting at 4:18 p.m. on October 30, 2008.

I hereby certify that to the best of my knowledge, the foregoing Minutes of the proceedings are accurate and complete.

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George G. Rhoads, M.D., M.P.H.
Chair, Advisory Committee on
Childhood Lead Poisoning Prevention