# DEPARTMENT OF HEALTH AND HUMAN SERVICES

# and

# CENTERS FOR DISEASE CONTROL AND PREVENTION

## convene the

## ADVISORY COMMITTEE ON
## CHILDHOOD LEAD POISONING PREVENTION

***New Orleans, Louisiana***
***March 22-23, 2005***

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## RECORD OF THE PROCEEDINGS

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# CENTERS FOR DISEASE CONTROL AND PREVENTION

## ADVISORY COMMITTEE ON
## CHILDHOOD LEAD POISONING PREVENTION
## *March 22-23, 2005*
## *New Orleans, Louisiana*

# Minutes of the Meeting

The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) convened a meeting of the Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP). The proceedings were held on March 22-23, 2005 at the Sheraton Hotel in New Orleans, Louisiana.

## Opening Session

Dr. Carla Campbell, the ACCLPP Chair, called the meeting to order at 8:41 a.m. on March 22, 2005. She welcomed the attendees to the proceedings and opened the floor for introductions. The list of participants is appended to the minutes as Attachment 1.

Dr. Campbell regrettably announced the recent death of Ms. Cushing Dolbeare, an ACCLPP member from 1996-2003. She and Dr. Mary Jean Brown, the Lead Poisoning Prevention Branch (LPPB) Chief and ACCLPP Executive Secretary, acknowledged Ms. Dolbeare's tremendous contributions to ACCLPP, CDC and childhood lead poisoning prevention as well as her strong advocacy for low-income housing.

Drs. Campbell and Brown recognized the valuable contributions of three members whose terms will soon expire: Drs. William Banner, Tracey Lynn and Kimberly Thompson. The three outgoing members were thanked for their outstanding service to ACCLPP, CDC and America's children. Drs. Campbell and Brown welcomed Ms. Linda Kite, a new ACCLPP member who represents the Healthy Homes Collaborative in particular and lead constituent groups in general.

Dr. Brown conveyed that voting members with a real or perceived conflict of interest on any agenda item are responsible for identifying these issues and recusing themselves from voting or participating in the deliberations.

## Update on LPPB Activities

Dr. Brown's status report covered the following areas. One, Dr. Brown was one of the keynote speakers at the American Academy of Pediatrics (AAP) Congressional briefing on March 1, 2005. The briefing was held to discuss lead poisoning among international adoptees and refugee children. Other presenters represented international children service organizations, immigration and refugee groups and academic institutions. The participants informed Congress that elevated blood lead levels (EBLLs) among these children may weaken U.S. capacity to reach the *Healthy People 2010* goal.

Two, LPPB published *Using GIS to Assess and Direct Childhood Lead Poisoning Prevention* in December 2004 as a guidance document for state and local childhood lead poisoning prevention programs (CLPPPs). The document provides recommendations on using mapping applications and identifying high-risk areas by evaluating screening, assessing the impact of targeted screening, and linking surveillance with census and tax assessor data. These efforts will be needed to advance toward a more targeted screening approach. LPPB has shared the document with the U.S. Department of Housing and Urban Development (HUD) and U.S. Environmental Protection Agency (EPA) to assist both agencies in allocating resources.

Three, LPPB is continuing to identify houses that successively poison children. LPPB used Chicago data from 1997-2003 to create a map of multiple offending properties. The map demonstrated that 69 buildings poisoned >700 children in a six-year period. Pre-1950 housing and children living in poverty were found to be overlapping risk factors. Specific buildings that serve as a source of multiple lead poisoning cases can be located within high-risk consensus tracks. These data can be used to demolish or clean up multiple offending properties. LPPB will conduct similar analyses in other communities throughout the country. Four, LPPB published a wealth of documents in 2004 in the *Morbidity and Mortality Weekly Report* (*MMWR*), scientific journals and non-peer reviewed journals.

Five, the most recent state-based BLL data have been reported to the CDC surveillance system, but analysis of the 2003 data has not been completed. LPPB expects to post state-based BLL data on its web site within two months. Preliminary 2003 data show that ~1.8 million children were tested, but LPPB acknowledges many states are excluded from this figure. LPPB plans to post individual state data on its web site to encourage states to submit solid data to CDC, but state strategic elimination plans are now available for viewing. LPPB will also post state screening plans on its web site in conjunction with the publication of AAP's statement in the summer of 2005. Pediatricians will be able to obtain information from the LPPB web site on screening requirements in their respective states.

Six, the CDC/EPA/HUD collaboration is continuing, particularly efforts to address multiple offending properties in various cities. "Operation Clean House" is the enforcement of the lead safe housing rule in properties with a HUD subsidy. CDC's role in the project is to identify properties that have poisoned a number of children, partner with the city or state agency to refine data, and submit the information to HUD. HUD will review the data to confirm that the offending property is public housing and then enforce the lead-safe housing rule. For privately-owned properties, EPA and HUD will jointly determine which agency should enforce the disclosure rule. Enforcement of the disclosure rule resulted in $4.8 million in voluntary settlements in 2004 and abatement of >10,000 units throughout the country. The funding is used to de-lead other properties in the city or community, administer screening services to children, and provide lead point-of-care analyzers to community health centers.

Enforcement of the disclosure rule for privately-owned properties was recently piloted in three cities. In Jacksonville, Florida, each housing agency initiated actions within its individual section and 21 properties were demolished. A new housing code to enforce abatement in privately-owned housing is being drafted. In Cleveland, Ohio, a new primary prevention strategy was designed to include a new enforcement task force and engage the housing finance agency in this effort. In New Orleans, Louisiana, efforts are currently being made to develop local ordinances and state laws because 1,446 properties were identified for clean-up. CDC, EPA and HUD will conduct similar activities in ~20 communities over the next year. The interagency collaboration has been productive in engaging additional partners, leveraging new resources and rejuvenating lead efforts at the local level.

Seven, the LPPB web site is being redesigned to include state lead poisoning laws, regulations and other new items. Eight, LPPB conducted a second program evaluation course with the Harvard School of Public Health (HSPH). Under this initiative, teams are established of LPPB staff at the federal level, CLPPP personnel at state and local levels, and students at master and doctorate levels. The project will be expanded in the third year to include other branches in the Division of Emergency and Environmental Health Services. The course is designed as a "Win-Win-Win Model" with an intensive five-day classroom course on program evaluation that emphasizes logic models, data-driven indicators, and the importance of process and outcome measures. The classroom course is followed by a week of intensive field activities and development of methodologies by students. CLPPPs then implement the evaluations over the following year.

Nine, LPPB is continuing its strong emphasis on training with a National Center for Healthy Housing (NCHH) contract and sponsorship of a grant for the Lead Poisoning Prevention Training Center. CDC allocates the funding to support state and local partners in training new personnel in program management, data and surveillance,

primary prevention and case management. The first training session was held in February 2005 with 44 attendees, but LPPB expects ~150 persons to participate in two additional training sessions in 2005. ACCLPP guidance documents are featured as key resources in the training sessions and ACCLPP members who were primary authors of these recommendations also teach some courses. To increase awareness at the federal level, LPPB invited EPA and HUD to send one staff member to the training sessions. LPPB is considering the possibility of conducting a "Lead 201" course in the future to provide training on using epidemiologic data, evaluating programs, conducting research, collaborating with advocacy groups, and identifying resources to assist state and local agencies in drafting legislation or regulations.

Ten, CDC's involvement with the federal interagency task force on non-housing lead sources is ongoing.

ACCLPP was extremely impressed with the scope of LPPB's activities. Several members described actions that are being taken at state and local levels to support and complement these projects. For example, Chicago, Connecticut, New York and Rhode Island are addressing public and privately-owned multiple offending properties, mapping areas to target high-risk areas, conducting "toxic tours" of communities with local legislators, and passing housing laws for lead-poisoned children. Several ACCLPP members made suggestions to refine LPPB's future activities.

- Collect data to show the actual unit, wing or other specific location in a multiple offending property of lead poisoned children. Apply this information in filling engineering and industrial hygiene data gaps.
- Explore the possibility of developing automatic and electronic linkages to HUD or other enforcement agencies to provide rapid notification of the location of multiple offending properties.
- Consider the possibility of replicating the new Wisconsin model in which the electronic immunization registry is linked to lead data in the same centralized repository.
- Review experiences in Chicago, Connecticut, Massachusetts, New York City and Philadelphia to determine whether the threat of private litigation is an effective deterrent in removing, demolishing or remediating multiple offending properties. For example, Connecticut has taken aggressive measures to incarcerate landlords who refuse to comply with lead-safe housing laws. The jail terms have ranged from two weeks to six months.

Dr. Brown made remarks in follow up to ACCLPP's discussion. CDC is collaborating with state and local partners to develop a set of core variables for electronic laboratory reporting. Some laboratories have made commitments to globally implement a CDC set of 12-15 core variables and electronically transmit data, including addresses and

provider contact information. NCHH funded a project to make epidemiologic geographic information system data available in Baltimore, Boston and Chicago. The public can obtain lead test results of properties in the three cities from www.leadsafehomes.info, but funding for the project has only been extended for an additional eight months. An attorney will continue to assist LPPB over the next two years in creating "bench books" to educate the judiciary about lead poisoning codes in specific jurisdictions.

## Procedures to Review and Approve ACCLPP Documents

Dr. Campbell announced that ACCLPP's policies and procedures were distributed to the members prior to the meeting. She asked the members to specifically focus on Section IV, "Process for Developing Recommendations." This section outlines the technical aspects for ACCLPP to establish workgroups, analyze policy, and draft, publish, implement and evaluate recommendations. This item was placed on the current meeting agenda because some members previously expressed concerns about the process for workgroups and the entire membership to develop, review, revise, finalize and approve ACCLPP documents.

Dr. Campbell asked ACCLPP to consider several options to address these concerns in the future. The members should pay more attention to suggestions of substantive changes that alter specific statements or the structure of a document. The members should assist the Chair in identifying major changes or conflicting suggestions. The members should provide more input on controversial issues. The members should formally state their respective positions for the record, such as agreement with or opposition to suggested changes.

Several members made comments to improve the process of reviewing and approving ACCLPP documents.

- Discuss substantive revisions proposed for a document during face-to-face meetings with the full membership. Call a formal vote, attempt to reach consensus or obtain general agreement when a major change is suggested or a controversial issue is raised about a document.
- Develop a different process to review and approve ACCLPP's educational documents that do not serve as official recommendations, guidelines or policy.
- Formally adopt and institutionalize a model ACCLPP previously used to revise and review documents. For example, authors of ACCLPP's clinical paper and Adverse Health Effects of BLLs <10 µg/dL Report (<10 Report) created and distributed a table with revisions proposed by members and the resolution of each comment.

- Recognize that the general pediatric community places great emphasis on ACCLPP's deliberations and outcomes. Develop a formal and transparent method of communication between ACCLPP and workgroup members outside of meetings. For example, LPPB could develop a listserv for workgroup members to discuss documents and post new drafts. The entire ACCLPP membership could then access the listserv to review the workgroup's communications and new iterations of documents.
- Consider ACCLPP's charter in improving the process to review and approve documents. Note that ACCLPP is charged with reviewing, regularly reporting on and making recommendations about childhood lead poisoning prevention practices.
- Make efforts to strengthen continuity in revising, finalizing and approving ACCLPP documents. For example, workgroup members whose ACCLPP terms will soon expire could be invited to continue to serve on workgroups.
- Review models that have been established by voluntary consensus standards organizations in developing standards and guidance documents. For example, the American Society for Testing and Materials (ASTM) has created books that outline its process to collect data at each stage of document development, respond to comments through a variety of mechanisms, and provide an opportunity for members to change their previous perspectives or positions as new information is gathered.
- Encourage members to submit written comments to authors of ACCLPP documents to ensure that suggestions are accurately captured.

Dr. Brown commented on several points raised by ACCLPP. She will contact the CDC Committee Management Office (CMO) to discuss the possibility of broadening the process to review and approve ACCLPP documents. She will ask whether the current approach can be expanded to include specific language on producing and disseminating educational documents and other materials that do not serve as official ACCLPP guidelines or policy.

In terms of formal and transparent communications between ACCLPP and workgroup members, Dr. Brown pointed out that updates of workgroup activities are presented during each ACCLPP meeting and LPPB staff informally take notes during workgroup meetings and conference calls. LPPB can distribute workgroup notes to all ACCLPP members, but does not have adequate resources to record, produce and disseminate formal workgroup minutes.

In addition to providing ACCLPP with workgroup notes and regular updates on workgroup activities, Dr. Brown asked the members to consider an electronic tracking system or other efficient strategies to keep the full membership informed given the natural rotation of members. However, she urged ACCLPP to be mindful of LPPB's

level funding over the past seven years and other budgetary constraints. For example, tremendous resources were required to develop and continually revise ACCLPP's <10 Report, including a 50% contribution of time from the primary author in CDC, a full-time Ph.D. epidemiologist in LPPB and several outside contractors.

ACCLPP made commitments to provide Dr. Brown with existing models of reviewing and approving advisory committee documents. Dr. Snodgrass will provide the web site address of the National Institutes of Health advisory committee that maintains a discussion board for its members. Dr. Friedman will attempt to provide an abbreviated version of the ASTM model of developing standards and guidance documents.

Dr. Campbell summarized two key outcomes from the discussion. ACCLPP will attempt to be as specific and transparent as possible in tracking changes of documents and clearly explaining the rationale for accepting or not accepting a particular comment. ACCLPP will make stronger efforts to identify changes that are agreed upon by the majority of voting members. Dr. Campbell pointed out that this item may be placed on the next meeting agenda for further discussion of options to review and approve ACCLPP documents.

## Update by the Lead and Pregnancy Workgroup (LPWG)

Dr. Jessica Leighton, the LPWG Chair, covered the following items in her status report. ACCLPP's initial interest in lead and pregnancy stemmed from the New York State law requiring all physicians to assess women for lead poisoning and test those who were found to be at high risk. The risk assessments have identified ~40 women per year with BLLs $\geq$20 µg/dL. Of this group, 90%-100% are foreign born. After formally establishing LPWG, ACCLPP charged the members with making recommendations in the following areas: prevention of lead exposure for women of child-bearing age and pregnant and lactating women; risk assessment and screening of pregnant women; medical, public health and environmental management of pregnant women; breast feeding by women with EBLLs; follow-up of infants and children of mothers with EBLLs; and further research and health education needs in the field.

LPWG formed three subgroups with ACCLPP representation on each group to review the literature and develop recommendations for each issue. Subgroup 1 will review the literature to make recommendations on prevalence, risk and screening. The subgroup will focus on whether pregnant women should be screened for lead poisoning; the point in pregnancy to conduct screening; triggers that can predict which women to screen; and culturally sensitive interventions to reduce exposure to potential sources of lead. Subgroup 2 will review the literature to make recommendations on maternal, pregnancy and child outcomes. The subgroup will focus on guidance medical providers should

give to women with EBLLs who are of child-bearing age or pregnant about delaying pregnancy or potential outcomes.

Subgroup 3 will review the literature to make recommendations on management, treatment and other interventions. The subgroup will focus on components of an intervention, such as eliminating sources; changing pica and other behaviors; reducing lead absorption post-exposure through proper nutrition and calcium supplementation; decreasing retention and toxicity; and increasing excretion through chelation. The subgroup will also provide guidance to clinicians and public health agencies on the follow-up and intervention schedule at various BLLs for pregnant and lactating women and the neonate as well as the BLL at which women should not breast feed.

Since July 2004, LPWG has held meetings and conference calls to review and refine its charge, make decisions on the literature reviews and establish the subgroups. Each subgroup will present its respective literature review to LPWG in April 2005. During its November 2004 meeting, LPWG decided to include women of child-bearing age to review the body burden of lead in this population, examine the prevalence data of BLLs in this group, and address the practicality of this issue. LPWG also reached agreement on its process to review the literature.

New York City contracted Mount Sinai to develop a report of lead and pregnancy and LPWG will use the literature review of this group as its basis. However, LPWG will conduct a search to identify new articles and expand Mount Sinai's summary tables. LPWG will not include animal data or information on women of child-bearing age with the exception of BLL surveillance data.

The subgroups will develop recommendations and respond to questions after the literature review is complete. Outcomes from these efforts will be shared with LPWG and the entire ACCLPP membership for review and input. LPWG has projected a March 2005-December 2006 time-line to draft and finalize reports of the literature reviews and recommendations. Dr. Leighton was pleased to announce that LPWG is currently on schedule with its projected time-line. A CD-ROM of articles for the literature review, the Mount Sinai draft report and tables to abstract literature was distributed to all LPWG members. The CD-ROM can also be made available to ACCLPP members upon request.

Drs. Campbell and Brown made additional remarks about LPWG's activities. LPWG members represent several key organizations, including AAP; ACCLPP; CDC; the American Academy of Family Practitioners; American College of Physicians; American College of Obstetrics and Gynecology; Council of State and Territorial Epidemiologists; and a nurse/midwife group. Each member of Subgroup 1 will be given the ten documents that were reviewed by the Mount Sinai workgroup as well as 17 new articles

on screening and culturally-sensitive interventions. LPWG will also use the blue book on managing children with EBLLs as a guide in formulating its recommendations.

Several ACCLPP members made suggestions to strengthen LPWG's activities.

- Clearly define "women of child-bearing age." Design questionnaires to determine whether teens and females of other ages had EBLLs as children.
- Distribute the LPWG draft report to La Leche League, an autism organization and other key stakeholder groups. Use this approach to obtain external input while the recommendations are being developed.
- Attempt to address two complex issues while formulating recommendations. Calcium is mobilized in women during the last few weeks of pregnancy and may result in the transfer of lead. Lead may mobilize in pregnant women who are placed on bed rest.
- Encourage Subgroup 2 to include animal data that can assist in identifying research gaps and developing a lead and pregnancy research agenda.

Dr. Brown reported that health departments throughout the country maintain names of females who had EBLLs as children and are now women of child-bearing age. The information could be used as an initial step to focus on long-term health effects of lead storage in bone, but a complex research project and substantial funding would still be required to fill data gaps in this area. However, this issue may be incorporated into the lead and pregnancy research agenda.

In terms of external input, Dr. Brown confirmed that the LPWG draft report will be released for a public comment period. Dr. Campbell encouraged ACCLPP to provide LPWG with data on the breast-feeding recommendation for BLLs $\geq$45 µg/dL. She also asked ACCLPP to submit names of other key stakeholder groups to include on distribution list for the final LPWG report.

## Update on the CDC and Centers for Medicare and Medicaid Services (CMS) Policy on Targeted Screening of Medicaid Children

Dr. Campbell reported that ACCLPP developed and submitted recommendations to the HHS Secretary in 2002 on the lead screening exception (LSE) for Medicaid-eligible children. ACCLPP undertook this activity in response to a direct request by the HHS Secretary at that time. Concerns were raised that universal lead screening may not be appropriate for all Medicaid children. CMS and some states noted that targeted lead screening may be a more cost-effective approach to reach at-risk children in need of screening.

Dr. Campbell conveyed that minimal actions have been taken in response to ACCLPP's 2002 guidance. As a result, a writing group of ACCLPP members drafted a letter dated March 10, 2005 requesting that the HHS Secretary reinvigorate efforts at the federal level by considering three recommendations. First, CMS should be directed to collaborate with CDC in developing and publishing a proposed revision to the state Medicaid manual that is consistent with ACCLPP's 2002 LSE recommendations. Second, consideration should be given to supporting a demonstration project of the proposed LSE process to evaluate its effectiveness prior to program-wide adoption. Third, CDC's expertise, experience and resources should be applied in collaborations with CMS to support and oversee the Medicaid policy and lead screening practices.

Dr. Campbell pointed out that ACCLPP's draft letter to the HHS Secretary was distributed in the meeting notebooks for review. She also mentioned that CMS has not responded to invitations to attend ACCLPP meetings and provide a status report on the 2002 recommendations.

Dr. Brown provided additional details about the CDC/CMS policy on targeted screening of Medicaid children. CDC had conversations with and distributed ACCLPP's draft letter to the CMS Deputy Director for Medicaid Services. CMS stated its unwillingness to dictate to states and emphasized its preference to defer to CDC in this matter. CMS's position is that ACCLPP's proposed LSE strategy will be too burdensome for states. CMS was publicly criticized when efforts were previously made in this area. Moreover, CMS is currently undergoing a reorganization and is not prioritizing the LSE strategy at this time. ACCLPP's membership includes a CMS *ex officio* member, but CMS has declined to send a representative to ACCLPP meetings for the past two years.

Dr. Brown noted that CDC and CMS staff agreed in 2004 CMS's existing 1115 waiver could be used to reach the same conclusions as ACCLPP's proposed LSE strategy. However, actions were not taken beyond the staff level to advance this decision. She acknowledged that challenges must still be addressed to improve lead screening of Medicaid children, but future activities may advance this effort. Most notably, new National Health And Nutrition Examination Survey data will be published in 2005 that show the proportion of Medicaid children being tested for lead has increased to 40%.

ACCLPP's draft letter to the HHS Secretary may be used to leverage CMS support in three areas. First, LPPB project officers would enter into formal relationships with CMS coordinators of the Early and Periodic Screening, Diagnosis and Treatment Program (EPSDT) at the regional rather than the CMS headquarters level. Second, CMS would enter into a memorandum of understanding to reimburse managed care organizations that pay for lead screening of Medicaid children under the Women, Infants and Children (WIC) program in states. Third, Medicaid and lead programs at state and local levels

have linked data to demonstrate screening gaps to providers. This strategy has resulted in substantial increases in the number of Medicaid children who are tested for lead. Dr. Brown asked ACCLPP to suggest additional approaches that can be implemented to improve targeted screening of Medicaid children.

Some ACCLPP members found the draft letter to be outstanding and clearly stated as written, while others made comments to advance the targeted screening policy and refine the draft letter before submission to the HHS Secretary.

- Replace “CDC ACCLPP” with “ACCLPP” after the first paragraph.
- Inform CMS about the benefits of targeted screening.
- Contact the CDC Office of General Counsel to determine whether state Medicaid agencies can be penalized for not complying with the blood lead screening mandate.
- Encourage states to generate pressure at the federal level. For example, LPPB could educate its state grantees about the benefits of targeted screening. States could then inform CMS that the blood lead screening mandate is not cost efficient and point out potential Medicare savings with implementation of ACCLPP’s proposed LSE strategy.
- Contact the National Conference of State Legislatures to explore the possibility of conducting a pilot project with the two states that requested lead screening waivers to determine specific impacts of the LSE on states.
- Consider whether ACCLPP should shift its focus from targeted screening to a new approach since the 2002 guidance has not been implemented to date and the majority of Medicaid children are still not screened.
- Ask CDC to conduct a comparative analysis of screening rates of Medicaid children in which the current lead screening policy and the proposed LSE strategy were used in two different communities. Apply existing data in this effort to demonstrate whether targeted screening is effective in increasing screening rates of Medicaid children at a lower or equal cost. Summarize and include data from the comparative analysis in the letter to the HHS Secretary.
- Incorporate additional text into the letter. For example, ongoing follow-up of recommendations in the 2000 *MMWR* article could be encouraged. State health departments and Medicaid agencies were advised to share and collectively analyze data to determine the actual number of children in this population who are not being screened. ACCLPP’s continuous concern with the lack of effective screening in Medicaid children could be strongly emphasized.
- Include language for constituents to use in externally advocating for support of targeted screening of Medicaid children.

- Link and publish claims and billing data for lead screening and EPSDT evaluations to document whether states are complying with the lead screening mandate.
- Integrate EPSDT and WIC data to analyze actual screening outcomes of Medicaid children in both programs.

Dr. Campbell asked ACCLPP to provide her with specific changes on the draft letter in writing within the next two weeks. She planned to revise, finalize and send the letter to the HHS Secretary in April 2005.

## Consumer Products Safety Commission Policy (CPSC) on Lead in Jewelry

Dr. Kristina Hatlelid is the ACCLPP *ex officio* member to CPSC. She provided an overview of CPSC's policy on lead in jewelry. In February 2005, CPSC announced an enforcement policy to reduce the potential for health risks from lead in children's metal jewelry. CPSC issued the policy because some importers were not aware of product requirements and had no knowledge of the process to determine a lead hazard. In addition to importers, CPSC also issued explicit guidance to manufacturers and retailers and released two laboratory test procedures to assess hazards of products.

The new CPSC policy recommends that lead levels be as low as possible and products be tested in compliance with its guidelines. Although "hazardous substances" in metal jewelry are clearly defined in the Federal Hazardous Substances Act, CPSC has no pre-market authority in determining product hazards. Manufacturers, importers and retailers have the discretion to make this determination and are not required to conduct pre-market tests of products.

CPSC's assessment of exposures to children takes into account the characteristics of the product as well as the child's age, likely behavior and common exposure routes. CPSC's regulation requirements and guidance on hazards of chronic exposures to lead were codified in 1998. The recommendations advised against exceeding 10 µg/dL for the BLL and 15 µg/day for the daily intake of accessible lead from a product. However, CPSC realizes that swallowing pieces of metal jewelry will most likely result in acute exposure in the majority of cases. CPSC also acknowledges that its acid extraction test to simulate ingestion will probably leach much larger amounts of lead from products than other tests.

CPSC is aware that compliance with its regulations is difficult because the policies apply to various groups in the stream of commerce of products, including distributors, manufacturers, importers and retailers. Current regulations do not allow CPSC to define "safe levels;" instead, "hazard levels" must be defined. Based on a BLL of 10

µg/dL and other existing data, CPSC estimated that children should not consume >100 µg of lead from a product in a short period of time. A "chronic time period" of exposure to a product is defined as two to four weeks.

CPSC determined that products containing <600 ppm of lead did not leach appreciable lead levels and established ≥600 ppm of lead as the initial screening level on any accessible piece of children's jewelry. CPSC will not pursue a recall or take any other corrective action if the lead content is <600 ppm, but will conduct an acid extraction test if any component of the jewelry is ≥600 ppm. CPSC will not seek corrective actions if the acid extraction test result is <175 µg, but will decide on corrective actions on a case-by-case basis if the result is >175 µg.

CPSC is continuing to evaluate its process of assessing products as more scientific and manufacturer data are collected. To obtain information on and investigate lead-containing products, CPSC partners with other federal agencies, reviews reports submitted by state and local health departments, and follows up on incidents reported by the public through the CPSC web site or telephone calls. Searches can be conducted on the CPSC web site for any press release or recall notice that was issued for a particular product. A formal public comment period was not opened for CPSC's new enforcement policy on lead in jewelry, but groups or individuals are welcome to submit comments to CPSC for consideration. The public can also access www.recalls.gov to obtain information on products that have been recalled by CPSC and other federal agencies.

Several ACCLPP members expressed concern with CPSC's definitions of "substantial illness" and "hazard levels." Some members also pointed out that primary prevention cannot be implemented with the current CPSC policy. Recalls or other public safety actions cannot be taken at the local level for a hazardous children's product until after an incident has occurred. ACCLPP noted that references were excluded from CPSC's standard operating procedures for determining lead and its availability in children's metal jewelry. Omission of these data may cause the procedures to be challenged. ACCLPP raised the possibility of strongly recommending that companies comply with a certification standard in which the lead content and all other potential hazards of a product are listed up front. EPA and HUD are currently performing experiments to determine whether parents and other consumers can effectively use spot test kits or other tools to identify lead or another hazardous substance in toys or other children's products.

ACCLPP made several suggestions to address CPSC's limited ability to take primary prevention measures. CPSC should rely on the federal interagency task force on non-housing lead sources. CPSC should become more involved in spot test kits and other technologies EPA and HUD are developing for consumer use. CPSC should establish

and widely publicize a web site for children's providers to easily and rapidly obtain information on recalled products with lead.

Dr. Brown encouraged ACCLPP to place this item on a future agenda to further discuss concerns about CPSC's cutoff of 175 µg to seek corrective actions of a product. She committed to inviting other CPSC speakers to a future meeting to facilitate the discussion. Dr. Campbell confirmed that primary prevention of non-housing sources of lead and an update by the interagency task force will be placed on ACCLPP's October 2005 meeting agenda.

## CDC Interim Recommendations on Refugee and Foreign-Born Children

Dr. Brown reported that a Sudanese refugee child in Manchester, New Hampshire died in May 2000 from lead poisoning with a BLL of ~392 µg/dL. As a result, New Hampshire now requires blood lead testing of all refugee children upon U.S. arrival and follow-up testing three to six months after placement. CDC's 2004 evaluation of EBLLs in refugee children in Massachusetts showed increases in BLLs after the children arrived and resettled in the United States for a period of three to six months. Of 92 children with both initial and follow-up tests, the number with BLLs $\geq$10 µg/dL increased to 43 and the highest BLL increased from 28-72 µg/dL. The majority of refugee children resettling in Manchester are from Africa.

CDC also evaluated cases in individual houses and found that lead paint was not the source of EBLLs in all refugee children. The assessment showed that housing lead hazards were moderate to low. A considerable amount of lead exposure was found from various non-housing sources after refugee children arrived in the United States. Products from native countries and cultural practices were found to contribute to the risk of lead poisoning and lead body burden. Nutritional status was found to be an extremely important factor in placing refugee children at risk. Growth retardation from chronic malnutrition or illness was found in 35% of the children and acute malnutrition or wasting was found in 22% of the children. The study also showed that age did not predict BLLs in refugee children.

CDC began receiving anecdotal reports of EBLLs in refugee children from other areas of the country and took several actions to address this issue. Lead programs throughout the country were provided with a list of refugee resettlement agencies in various cities, the number of children who had been resettled between 2003-2005 and contact information. CDC hoped the lead programs and resettlement agencies would collaborate in performing both initial and follow-up tests to refugee children.

CDC partnered with the Office of Refugee Resettlement (ORR) and U.S. Department of State to develop the following interim recommendations. Children 6-59 months of age should be given a multivitamin with iron immediately after U.S. arrival. BLL testing should be administered to all refugee children six months to 16 years of age upon U.S. entry. Testing should be repeated for children six months to six years of age three to six months after placement in housing and also for older children if warranted by local conditions.

Educational materials should be developed for healthcare and resettlement case workers and for partner agencies. A toolkit will be developed as part of the health education and outreach materials to provide guidance to refugee and resettlement workers in evaluating housing with a visual assessment. CDC and NCHH are jointly collecting data from various sources to validate the visual assessment. The interim recommendations were circulated to state refugee health coordinators, state and local lead programs and voluntary programs. The interim recommendations were also distributed to ACCLPP for review and input and will become official CDC guidance based on agreement by a majority of voting members.

ORR circulated a letter to state refugee and refugee health coordinators, national voluntary organizations and mutual assistance associations. The letter emphasized that Refugee Medical Assistance, State Child Health Insurance Programs or Medicaid will reimburse the organizations for lead testing. The letter contained three requests. Any nutritional deficiencies in refugee children should be immediately addressed. Untested refugee children <6 years of age should be immediately tested. Follow-up lead testing should be performed three to six months after placement in housing.

CDC recently initiated an Epi-Aid in New Hampshire to identify factors that may increase the risk of exposure to lead among refugee children after resettlement. The study is also designed to intervene on identified risk factors to prevent lead exposure in this vulnerable population. Phase 1 will be implemented from March 20-27, 2005. Refugee families will be interviewed and WIC records will be reviewed to determine iron status and anthropometric data. Phase 2 will be implemented from April 20-27, 2005. Non-refugee families in the same buildings will be interviewed, blood lead testing will be performed, and WIC records will be reviewed to determine anthropometric data and iron status.

Mr. Ajun Prasad, of the HHS Office of Global Health Affairs (OGHA), asked ACCLPP to consider whether CDC's interim recommendations can be applied to a broader audience than refugee children. He noted that many risk factors in this population are the same as those found in low-income U.S. communities.

ACCLPP commented on the housing aspects of CDC's interim recommendations. Some members believed that stronger efforts should be made to place refugee children in lead-safe housing. Most notably, the majority of HUD homes do not have lead-based paint hazards and are suitable for refugee children to live. Refugee and resettlement workers can take HUD's web-based training course to strengthen skills in visually assessing deteriorated paint. Because remediation of deteriorated lead-based paint from a visual assessment does not require an inspection or laboratory analysis, the placement of refugee children in lead-safe housing is economically feasible from HUD's perspective. Dr. Warren Friedman is the ACCLPP *ex officio* member to HUD. He committed to following up with OGHA to provide support in training refugee and resettlement workers who will perform visual assessments of housing.

Other ACCLPP members pointed out that housing lead hazards were found to be moderate or low in CDC's 2004 study of EBLLs in refugee children in Massachusetts. As a result, the members advised CDC to continue its focus on nutritional status and other non-housing risk factors for EBLLs. Other comments by ACCLPP to refine CDC's interim recommendations are outlined below.

- Change the broad recommendation of performing a "nutritional evaluation" to more focused guidance of assessing "nutritional status."
- Strongly advise that a full blood count be administered to examine other indices because the hemoglobin hematocrit test alone is insensitive. Provide examples of iron deficiency and other tests and explicitly outline the steps involved with a nutritional evaluation.
- Place the recommendation to "evaluate the value of empiric iron therapy among refugee children" in a separate section because the language refers to early post-arrival evaluation therapy.
- Clarify the background section because "Z-scores" are commonly understood in the research community, but may not be widely used by practicing providers in applying weight and height of a child to the formula. Use "body mass index" instead and clearly define "acute" and "chronic" malnutrition.
- Add language to recommend that children >6 years of age be given appropriate medical attention in terms of nutrition.
- Tailor the recommendations to be sensitive to cultural beliefs and practices of specific refugee groups.
- Change the second "health education/outreach" recommendation to "CDC and its state and local partners should develop and periodically update training and education modules" to ensure that materials are refined as new information is gathered.
- Replace "iron therapy" with "multivitamin with iron."

A motion to accept CDC's interim recommendations for lead poisoning prevention in newly arrived refugee children with the changes suggested by ACCLPP was properly placed on the floor and seconded by Drs. Stephens and Slota-Varma, respectively. The motion was **unanimously approved** with no further discussion. Dr. Brown will revise the document based on ACCLPP's verbal comments and additional suggestions submitted in writing. The revised recommendations will be distributed to the voting members for final approval.

## Update on ACCLPP Documents

Dr. Brown announced that the CDC clearance process was completed for ACCLPP's <10 Report and accompanying public health statement. Both documents and a preface are currently awaiting review by National Center for Environmental Health/Agency for Toxic Substances and Disease Registry leadership. After approval at this level, the documents will be typeset, published and posted on the CDC web site. Dr. Brown anticipates that the final process will be completed in May 2005. She will notify ACCLPP by e-mail when the documents are available.

Dr. Helen Binns is the ACCLPP liaison member to AAP and primary author of *Blood Lead Levels Below 10 µg/dL: Information to Aid Decision-Making and Counseling in the Health Care Setting*. She provided an update on next steps to publish the document. The clinical paper serves as an educational resource to children's providers rather than official ACCLPP policy or guidance. As a result, ACCLPP should not serve as the author because the document will need to be cleared in accordance with CDC policies and procedures for publication in the *MMWR*.

The clinical paper was previously approved by ACCLPP, but Dr. Binns confirmed that she will consider comments raised during the current meeting. Dr. Rhoads pointed out that clinicians may give more attention to BLLs in the range of 6-9 µg/dL for younger children, *i.e.*, <1 year of age. Ms. Johnson suggested that the sentence on page 3, "We are at the point where no safe level for lead can be defined," be bolded and italicized. Dr. Gitterman recommended that a reference or link to ACCLPP's <10 Report and accompanying public health statement be incorporated into the clinical paper.

Dr. Campbell made additional remarks about publication of the clinical paper. ACCLPP previously voted to submit the clinical paper to *Pediatrics* first and to other journals second if *Pediatrics* declined publication. The *Pediatrics* editor confirmed that an advisory committee can submit a paper to the journal as a committee or as a group of authors with a maximum number of 12 authors. Based on this process, the clinical paper can be submitted to *Pediatrics* by listing one or more individual authors up to 12

and acknowledging an unlimited number of contributors. Papers are typically published in *Pediatrics* within two to three months after acceptance.

In terms of CDC, Dr. Campbell conveyed that restrictions are placed on publication venues of advisory committee documents. With ACCLPP as the collective author, the clinical paper can be published in the *MMWR* or as a stand-alone CDC document. The CDC clearance process for publication of *MMWR* articles requires an extensive period of time and a rigorous review. Based on time-lines and other requirements of a journal versus the *MMWR*, Dr. Campbell strongly favored publication of the clinical paper in *Pediatrics*. This venue will allow the document to be distributed to and used by pediatricians and other children's providers on a more timely basis.

Dr. Brown described other options for ACCLPP to consider in terms of a CDC publication. The clinical paper can be published as a useful review of practice in the *MMWR* and can also be co-published in both the *MMWR* and another journal. However, the queue to initiate the review and clearance process for publication in the *MMWR* will be full until September 2005.

ACCLPP members made three recommendations on publishing the clinical paper. First, the document should be co-published in both the *MMWR* and another journal. Exclusion of the "ACCLPP" authorship will serve as a major loss to the document and may result in less credibility and recognition. Second, the clinical paper should be published in the *MMWR* and AAP should be asked to directly distribute the document to its membership. Third, the document should be published in *Pediatrics* listing Dr. Binns as the primary author and acknowledging the contributions of other ACCLPP members as individuals.

Dr. Campbell made several remarks in response to the discussion. The "no safe level for lead" sentence on page 3 can serve as the first sentence in the paragraph to address Dr. Rhoads' disagreement with bolding and italicizing the text. The *Pediatrics* editor will be contacted to determine if the clinical paper can be co-published in both the journal and *MMWR*. *Archives of Pediatric and Adolescent Medicine* and *JAMA* will be considered as backup journals in the event *Pediatrics* does not allow co-publication. Direct distribution of the clinical paper to the AAP membership will exclude children's providers other than pediatricians, such as family and nurse practitioners and physician assistants. However, CDC could be asked to explore the possibility of disseminating the document through a mass mailing to include a broader range of children's providers.

A motion to publish ACCLPP's clinical paper with a preferred and backup strategy was properly placed on the floor and seconded by Drs. Stephens and Ho, respectively. The motion was **unanimously approved** with no further discussion. Dr. Campbell clarified the two approaches. Plan A is the preferred strategy and will be implemented first. The

clinical paper will be submitted to the *MMWR* and then to *Pediatrics* or another journal that allows co-publication or republication with the *MMWR*. ACCLPP will be listed as the author and all members who give their permission will be named.

Plan B is the backup strategy and will only be implemented if plan A is not feasible. The clinical paper will be to submitted to *Pediatrics* first and the *Archives of Pediatric and Adolescent Medicine* second. Dr. Binns will be listed as the author and all ACCLPP members who give their permission will be acknowledged as contributors. On behalf of ACCLPP, Dr. Campbell thanked Dr. Binns for her tremendous dedication to developing and revising the clinical paper. She confirmed that revisions proposed by the *MMWR*, *Pediatrics* or another journal will be circulated to ACCLPP for review and input.

## Status of Lead in New Orleans

Dr. Kevin Stephens is an ACCLPP member and Director of the City of New Orleans Health Department (NOHD). He provided an overview of NOHD's ongoing lead projects. NOHD mapped several risk factors for lead in New Orleans, including the distribution of lead, minority populations, occupancy rates of renters, pre-1950 housing and BLLs in the city. The maps showed a significant overlap among all of these factors. NOHD also generated a list of zip codes to demonstrate the city's unique housing stock. Many houses in New Orleans were built before 1950 and a large number of children with EBLLs live in these areas. Of the houses that were built in New Orleans prior to the 1978 ban on lead-based paint, 83% have still not been abated.

The New Orleans CLPPP (NOCLPPP) was established in 1972 with a mission to identify and reduce lead poisoning morbidity in children six months to six years of age. NOCLPPP's goals are to identify at-risk children early, follow up and monitor appropriate services and treatment, promptly identify and eliminate lead sources, educate patients to reduce further exposure, and provide screening and intervention. Of 6,577 children screened by NOCLPPP in 1999, 1,672 had EBLLs and 317 had BLLs >20 µg/dL. In 2003, NOCLPPP increased its screening efforts to 8,500 children. The prevention activities and other interventions resulted in a reduction of EBLLs and a decrease in the number of children with BLLs >20 µg/dL from 317 to 254.

In addition to increased screening, NOCLPPP has also taken other actions to reduce EBLLs in children. New Orleans was the first area in the state to establish a lead-safe house. Families with children with EBLLs are removed from lead hazardous homes and temporarily placed in the lead-safe house while abatements are performed. NOHD assisted in passing a ban on dry sanding of paint in Orleans Parish and has authority to make decisions on violations of lead abatement orders. NOHD expects to receive three portable x-ray fluorescence (XRF) lead testing devices to improve its capacity to verify

compliance with the dry sanding ordinance. Despite these efforts, however, problems still exist with current lead ordinances. Most children with EBLLs live in areas with the majority of pre-1950 housing. Current estimates show that 109,345 houses in Orleans Parish were built before 1950.

NOHD is now exploring the possibility of proposing a lead ordinance with the following requirements. A lead inspector must give each house built before 1950 a 20-year lead-safe certificate prior to an act of sale. "Lead safe" would be defined as no immediate threat of lead exposure and required abatement or encapsulation if lead is known to exist. Potential buyers with children <6 years of age would be strongly urged to obtain a "lead-safe" certificate. Property owners must make the home lead safe within three months of the initial inspection for any child with a confirmed BLL >10 µg/dL in a lead hazardous home based on an environmental lead inspection.

NOHD may declare the property "unfit for human habitation" if the owner does not comply with lead abatement. Random inspections of compliance with lead-safe requirements may be performed and fines, license suspensions or other sanctions may be imposed for violations. NOHD believes the city council will pass the proposed ordinance based on compelling data and strong interest within the local government to address problems with the pre-1950 housing stock in New Orleans.

NOHD is also considering the possibility of proposing national legislation in which income tax credits would be offered to homeowners to offset lead abatement expenses. Tax credits would be offered to developers or landlords for abatement of apartment complexes or rental units. Dr. Stephens emphasized that all of these actions are being taken to achieve the overarching goal of completely eliminating housing lead exposures in New Orleans over the next 20 years.

Several ACCLPP members made suggestions for NOCLPPP to consider in ongoing efforts to further develop and pass the proposed lead ordinance and national legislation.

- Apply the traditional HUD definition of "lead safe" that is used by other areas of the country. For example, NOCLPPP's proposed 20-year lead-safe certificate would be viewed as "abatement" in other jurisdictions and will be extremely difficult to understand and enforce.
- Provide the city council with HUD's peer-reviewed reports when the case is made to pass the proposed ordinance. Use these data to demonstrate that interim controls are effective for several years.
- Review the Ohio model in which property owners are presumed to have lead-safe properties if the removal of immediate lead risks and lead-safe renovation practices can be documented.

- Partner with housing agencies to assist in enforcing lead-safe requirements for rental properties.
- Include clear language on safe work practices if the proposed ordinance or national legislation is passed.
- Review existing efforts in further development of the proposed national legislation. For example, homeowners with a child who has been medically diagnosed as lead poisoned can deduct lead remediation expenses on itemized income tax returns. The Massachusetts state income tax credit for property owners who perform lead abatement does not require a lead-poisoned child to reside in the home. The Internal Revenue Service allows a low-income housing credit for rental property owners who improve and agree to maintain the rental properties in good condition for 15 years.

## Public Comment Period

Mr. Craig Boreiko, of the International Lead Zinc Research Organization, urged ACCLPP to engage a broader group of stakeholders in reviewing its documents and obtaining input on other activities. For example, industry representatives can provide valuable feedback on the use of lead in products. ACCLPP can also collaborate and coordinate efforts with organizations at both domestic and international levels to strengthen knowledge, eliminate duplication of existing activities and partner in research projects for children's health. Several ACCLPP initiatives are similar to other groups and ACCLPP's deliberations are of interest to and followed by a variety of organizations throughout the world.

Ms. Jane Luxton is an attorney with King & Spalding who has a strong interest in ACCLPP's activities. She acknowledged the tremendous improvements in ACCLPP after Dr. Brown began serving as the Executive Secretary, particularly the more open and transparent process. However, she pointed out that ACCLPP's policies and procedures and another document were distributed earlier in the day, but not to members of the public. As a result, the public was unable to review the materials and offer feedback during the public comment period. Ms. Luxton urged ACCLPP to be more open and transparent in distributing documents if its goal is to solicit useful input from the public.

Dr. Brown clarified that the CDC CMO explicitly stated ACCLPP's policies and procedures are an internal document to only be shared with voting members. However, all other materials that are not of this nature and are produced or reviewed by ACCLPP are available for distribution to the public.

Mr. Timothy Morta of LPPB is the NOCLPPP Project Officer. He provided a local perspective of childhood lead poisoning prevention activities. Documents that have been produced on sharing public health information can strengthen existing lead projects. These materials can be used as a guide for CDC, EPA, HUD and CLPPPs to exchange addresses and other information on children with EBLLs. The development of state lead screening plans requires extensive involvement by LPPB, CLPPPs and local advisory committees to identify areas at highest risk. LPPB and CLPPPs hope that CMS will devote the same amount of effort in granting lead screening waivers. Mr. Morta emphasized that the ACCLPP meeting in New Orleans served as an extremely valuable experience to both state and local CLPPP staff. He encouraged ACCLPP to hold future meetings at other grantee sites.

With no further discussion or business brought before ACCLPP, Dr. Campbell recessed the meeting at 5:41 p.m. on March 22, 2005.

## Overview of NOCLPPP

Dr. Campbell reconvened the ACCLPP meeting at 8:40 a.m. on March 23, 2005 and yielded the floor to the first presenter. Ms. Victoria Griffin is the NOCLPPP Program Manager and was pleased to announce that NOCLPPP was selected as one of the CDC grantees for participation in the LPPB program evaluation course in 2004. NOCLPPP will incorporate the methodology developed by the HSPH graduate students into its program and implement the new initiative in 2005.

Ms. Jennie Epstein and Mr. Jan Van Esch are two of the HSPH graduate students who participated in the LPPB program evaluation course in 2004. They described their experiences, activities and lessons learned in evaluating NOCLPPP. A review of the state strategic plan and collection of background data showed that four parishes in Louisiana are designated as high risk based on the percentage of pre-1950 housing and children with EBLLs. New Orleans was found to have the highest risk of the four parishes due to ~49% of pre-1950 housing, ~14% of children with EBLLs, and lead tests for only ~23% of children in 2003. As a result, New Orleans will mandate a screening law in July 2005 for children 0-6 years of age.

The impact and implementation of the new mandated screening legislation was evaluated and a plan was developed for this effort, particularly education to medical providers, families and landlords about the new law. The educational efforts were expected to result in higher screening rates, better detection of children with EBLLs and increased identification of houses containing lead. The long-term impact of these activities would be to meet the *Healthy People 2010* goal of eliminating EBLLs in

children. A variety of data sources, partners and other resources were identified to assist in evaluating the New Orleans screening legislation.

A strategy was developed to demonstrate the impact of the new screening law using Orleans Parish as the case and Caddo Parish as the control. Outcome indicators that were measured included Medicaid, non-Medicaid and the total number of children screened pre- and post-legislation; the number of houses detected with high lead levels and the number of pre-1950 houses; and the difference between provider screening rates pre- and post-legislation. Screening as a result of the law, lead poisoning reduction and the community care project were identified as potential confounders. The community care initiative was launched in 2004 in New Orleans to mandate screening for all children 1-2 years of age and has the same role as the new legislation.

Several recommendations were made to enhance the evaluation of the new screening law. A NOCLPPP work plan should be developed that is specific to the legislation. A detailed activity plan should be created with clearly defined and measurable goals, objectives, time-lines and outcomes. Responsibilities should be assigned for specific tasks and positions in implementing the program evaluation. Data should be reported, surveillance should be conducted, and measurable outcomes should be used to track progress over time. Strategies should be explored to increase provider screening rates, such as incentives or enforcement of penalties. Collaborations should be enhanced by creating a multi-agency advisory committee and convening round tables.

Based on the outcomes and recommendations from the project, NOCLPP has decided to implement the evaluation framework developed by the HSPH graduate students. The legislation will be expanded to other high-risk areas in the state based on its success in Orleans Parish. Ms. Epstein and Mr. Van Esch noted that the highlights from their participation in the project included opportunities to combine classroom theory with actual field practice, collaborate with staff from various agencies and strengthen partnerships.

NOCLPPP and Louisiana CLPPP (LACLPPP) staff provided additional details about state and local lead activities in response to ACCLPP's questions. Mr. Charles Myers confirmed that NOCLPPP amended the legislation in partnership with its advisory committee of representatives from AAP, community groups and private physicians. Stakeholders will continue to be engaged during the implementation phase. Ms. Rhonda Smith conveyed that all laboratories in Louisiana are required to report blood lead screening results. The test results can be linked to individual providers. LACLPPP has a relatively new surveillance system and is still attempting to match its data with Medicaid to determine the number of Medicaid-eligible children who are screened.

Dr. Brown pointed out that the program evaluation course demonstrated the usefulness of evaluation in convening a diverse group of stakeholders. NOCLPPP and LACLPPP are now attempting to develop creative strategies to measure the impact of activities and establish strong linkages. ACCLPP joined Dr. Brown in applauding the HSPH graduate students, NOCLPPP and LACLPPP in these efforts.

## HUD Survey of Child Care Centers

Dr. Friedman provided lead results from the first national environmental health survey of child care centers that was jointly conducted by HUD, EPA and CPSC in 2003. The activity was implemented in response to the 2000 federal strategy that recommended child care centers be surveyed for lead hazards because 4.6 million children <6 years of age attend these centers. HUD estimates that 100,000 institutional (state-licensed) child care centers in the continental United States serve children <6 years of age. The survey was designed with ~11 state-licensed centers in 30 primary sampling units in various parts of the country. Of 334 total sampled centers, 68 were not eligible, leaving 266 eligible; of them, 168 (63%) agreed to participate and all of these completed the survey. These institutional child care centers were located in both commercial buildings and residential homes.

Center directors typically answered survey questions in person; analyses of the participating centers generally covered two classrooms, one multi-purpose room and exterior bare soil. Lead in painted building components, bookshelves and cabinets in rooms; play equipment and other painted components on exterior surfaces was collected by x-ray fluorescence (XRF); dust wipes were collected from floors and window sills in rooms; and composite soil core samples were collected in play areas. Dust and soil samples were also collected and analyzed for allergens and pesticide residue. Several limitations were identified in the survey, including variations in sampling and measurements; an underestimate of lead-based paint hazards (LBPHs) due to incomplete sampling of rooms; a small bias based on a comparison with the National Survey of Lead and Allergens in Housing; and an inability to obtain accurate income levels of families due to time constraints (in order to avoid burdening the children's parents with a separate survey element).

Several terms were defined for purposes of the survey; these are based on EPA and HUD regulations (40 CFR 745, subpart D, and 24 CFR 35, subpart R). "Significant deterioration of LBPHs" was defined as 2 $ft^2$ in the interior and 20 $ft^2$ in the exterior for large surfaces and 10% of the total area of a component type for small surfaces. "Lead-contaminated dust" was defined as 40 $\mu g/ft^2$ on floors and 250 $\mu g/ft^2$ on window sills. "Bare lead-contaminated soil" was defined as 400 µg/g in play areas and 1200 µg/g in 9 $ft^2$ of bare soil in the remainder of the yard. Results of the survey of 168 institutional

child care centers representing 100,000 centers nationally are as follows. LBPHs were seen in 28% of centers and significant LBPHs were seen in 14%. Centers that were in older buildings, had a majority of African American children and located in the Northeast and Midwest were more likely to have LBPHs. No difference in LBPHs was seen between centers in urban and rural areas.

Of the 14% of centers with significant LBPHs, 0.3% (309 of 99,952 centers nationwide) had both paint lead and dust lead hazards. All centers with soil lead hazards also had paint lead hazards, but no dust lead hazards. Significantly deteriorated lead-based paint was seen in 11% of centers and dust lead hazards were seen in 3% of centers. Only 1% of centers had both significantly deteriorated LBPHs and soil lead hazards. None of the 168 sample centers had a floor dust lead hazard, but 3% had window sill lead loadings above the EPA standard of $\geq$250 µg/ft$^2$. Significantly deteriorated lead-based paint and window sill dust lead loadings were most often seen in buildings built before 1960.

Child care centers were found to be cleaner than homes on average with respect to LBPHs. Overall, the survey reinforced the existence of hazards in child care centers and will assist in justifying EPA's programmatic efforts. The findings also demonstrated the need for HUD to strengthen education and outreach about its requirement for playgrounds associated with assisted housing to be free of deteriorated lead-based paint.

ACCLPP commended HUD and its partner agencies on taking initial steps to collect environmental health data at the national level. However, some members expressed concern that 37% of eligible child care centers did not participate in the survey and made suggestions to refine the design if a second survey is implemented in the future.

- Include unlicensed centers in the second survey.
- Administer a random survey to the 37% of eligible child care centers to determine reasons for non-participation.
- Conduct a follow-up study by comparing child care centers where LBPHs were and were not found. Link these data with BLLs of children who attended centers in both groups to determine if LBPHs had an impact. Include environmental samples from residential homes of these children to ensure resources are not inappropriately allocated to a small number of hazards found in child care centers.
- Review the survey data to obtain the actual number of the 168 state-licensed centers that were located in commercial buildings versus residential homes.
- Include more than 168 sample centers in the second survey to examine differences in state regulations and engage a variety of stakeholders in

this effort. For example, the National Resource Center for Health and Safety in Child Care is a Health Resources and Services Administration grantee that annually updates national health and safety performance guidelines for out-of-home care centers.

- Educate the sample centers about proper cleaning procedures because dust hazards were found in many centers.

Dr. Friedman provided additional remarks in response to ACCLPP's discussion. Because an institutional review board approved the survey, HUD was able to provide feedback to centers where significant LBPHs were found. HUD will partner with HHS agencies if another survey is implemented in the future to ensure that a sample of unlicensed centers is representative of the national stock.

Dr. Friedman emphasized that the suggestion of a follow-up study is an excellent concept, but cannot be conducted by HUD with the sample child care centers, because identifying information on the sample centers was destroyed in the interest of privacy protection. Moreover, HHS agencies have more public health expertise than HUD and would be better suited to perform research to determine the impact of LBPHs in child care centers and residential homes on children's BLLs. Dr. Friedman informed ACCLPP that results of the child care survey can be accessed on the HUD web site and will also be published in several journals. Dr. Stubbs-Wynn confirmed that she will provide Dr. Brown with the out-of-home care center guidelines.

## Update on the Federal Interagency Task Force on Non-Housing Lead Sources

Dr. Brown provided a status report on the task force's activities. The task force was formed because the *Healthy People 2010* goal of eliminating EBLLs in children cannot be reached without addressing the public health issue of non-housing lead sources. Primary prevention of other lead sources includes interventions before the child's BLL becomes elevated. Most notably, communities where cultural practices and traditional medicines place families at risk should be identified. Lead poisoning prevention activities should be incorporated into health and community services that reach families at high risk for exposure. Current and new non-essential uses of lead should be controlled or eliminated, particularly in toys, food implements and cosmetics. A system should be developed that is easier to manage and more transparent for agencies to respond to non-housing lead poisoning cases among children.

Non-paint lead sources have diverse exposures that can be produced in home settings and are important to subgroups in certain populations. Non-traditional sources can be based on cultural beliefs and traditions and are difficult to regulate, particularly traditional ethnic foods and remedies. Task force members include CDC, CPSC, EPA,

HUD, HHS, the Department of Commerce, Food and Drug Administration, Occupational Safety and Health Administration, U.S. Customs, and the White House Office of Science and Technology Policy. Each agency will take its respective role in controlling, enforcing, regulating, remediating and treating exposures from non-paint sources. The purpose of the task force is to take responsibility for non-residential paint sources of lead poisoning across government agencies. The interagency task force was found to be the best mechanism to draft a coordinated, effective and data-driven strategy.

The overall objective of the task force is to develop a comprehensive strategy to control non-paint lead sources through interagency collaboration and cooperation. The task force has drafted its mission statement with the following language. Strategies that reduce lead exposure from sources other than lead paint will be investigated and promoted. Task force members will share educational and agency resources related to non-residential paint sources of lead and will also create a consistent policy to control or eliminate non-paint sources.

The interagency task force has identified several actions to take in the future. Activities will continue to be implemented at the staff level. Each agency will compile an individual list of known sources and CDC will develop a database of all known sources gathered by the agencies. To date, the agencies have identified several traditional remedies, cosmetics and consumer products that serve as exposure sources, but the concentration of lead, manufacturers and status of the products still need to be determined. Mechanisms will be designed to efficiently respond to case reports. Each agency will review its individual authority to regulate non-paint sources of lead and present this information at the next task force meeting in May 2005. CDC will synthesize the agency reports and the task force will then identify gaps and explore strategies to address these issues. Dr. Brown welcomed suggestions from ACCLPP on other areas the interagency task force should focus on in the future. She hoped that Dr. Snodgrass, an ACCLPP member, would participate in the May 2005 task force meeting to provide input.

ACCLPP was extremely pleased that CDC will develop a database of known non-housing lead sources. This information will be extremely useful to CLPPPs and health departments in evaluating sources and responding to case reports of lead poisoning. Several members listed data sources that can be used to document the extent of the problem from other lead sources. Suggestions were also made to refine the task force's future activities.

- Use the comprehensive list of lead sources in the blue book of managing EBLLs as a basis for developing the non-housing lead sources database. Prioritize the most hazardous sources in the database.

- Include fingernail polish, cardboard books chewed by young children and non-painted building components in the database, such as fixtures on school water fountains.
- Categorize the database into two lists of other sources that are known to have poisoned children and additional products with lead certain populations may encounter.
- Engage ACCLPP as an active partner in future task force activities.
- Create a compendium of laboratory methodologies that can be applied in identifying various products.
- Encourage EPA to revise and update its outreach documents as the task force identifies additional non-housing lead sources.
- Review the National Institute for Occupational Safety and Health meta-analysis that was performed to determine the number of children with BLLs >10 µg/dL who were exposed to lead from occupational take-home sources.
- Ensure that educational and outreach materials developed by the task force in the future are culturally sensitive and positive toward racial/ethnic groups.

## Implementation of the ACCLPP Primary Prevention Recommendations

Dr. Campbell announced that federal and other funding sources to implement ACCLPP's primary prevention recommendations will be placed on the October 2005 meeting agenda. She conveyed that representatives of CDC, EPA, HUD, the National Center for Lead Safe Housing and other key groups should be invited to the meeting to discuss this issue. She proposed several questions for ACCLPP to consider asking the agencies during the discussion. One, what are the specific activities this agency is undertaking to foster implementation of the primary prevention guidelines for housing sources of lead at state and local levels? Two, is this agency directly funding primary prevention activities? Three, has this agency developed strategies to advise state and local health departments on leveraging funds to implement primary prevention activities?

Dr. Campbell opened the floor for ACCLPP to suggest additional questions to ask the agencies or identify other groups to invite to the meeting for participation in the discussion. ACCLPP's comments on this issue are outlined below.

- Develop a written statement with clearly defined goals, objectives and anticipated outcomes of the discussion.
- Ensure that appropriate decision-makers from the federal agencies are invited to the October 2005 ACCLPP meeting.

- Ask the federal agencies to describe opportunities for partnering with non-governmental organizations at local and national levels that have a strong interest in primary prevention.
- Invite representatives of other groups to attend the October 2005 ACCLPP meeting and participate in the discussion, including the National Property Association; banking, construction and insurance industries; Window and Door Manufacturers Association; and other organizations that develop industry standards for housing, renovations and new construction. Invite local representatives to discuss problems at the local level with implementing primary prevention activities.
- Ask each agency to clearly define its respective role and responsibility in implementing the primary prevention recommendations.
- Urge the federal agencies to explore strategies to assist local and state agencies in evaluating properties and creating tools to organize primary prevention activities. For example, houses with a known history of poisoning children can be screened and categorized. State and local health departments can then compile the results into a database along with resources to address the lead problem. Landlords, homeowners and renters can be given access to the database.
- Encourage the federal agencies to assist state and local agencies in educating code enforcement personnel on lead-safe work practices.
- Ask the agencies to examine housing sources of lead other than paint. For example, lead-coated copper on residential roofs is still allowed in some areas of the country, but rain could cause the lead to migrate to soil.

Dr. Campbell confirmed that the proposed questions, suggested list of attendees and other recommendations will be summarized and distributed to ACCLPP for review and input. She and Dr. Brown will contact ACCLPP's *ex officio* members for EPA and HUD to identify appropriate decision-makers from the respective agencies to invite to the meeting.

## New ACCLPP Business

Dr. Brown described an issue that was recently conveyed to her by an ACCLPP member. Ms. Valarie Johnson is a community advocate and has discussed ACCLPP's <10 Report and other deliberations with several parent organizations of lead-poisoned children. Many parents in these groups were extremely surprised that ACCLPP has not issued guidance to lower the BLL of concern from 10 to 5 µg/dL. Ms. Johnson is concerned that ACCLPP's messages may be contradictory or inconsistent. On the one hand, ACCLPP has stated that a "safe" level of lead is unknown. On the other hand, ACCLPP has noted that the *Healthy People 2010* goal of eliminating EBLLs in children

will not be reached by continuing to use the medical model of identification and intervention at lower BLLs. Dr. Brown mentioned that Ms. Johnson's concerns may be addressed by directly distributing clear, concise and easily understood documents to parent organizations beyond the CDC web site.

Dr. Campbell pointed out that the dilemma stems from ACCLPP's role and different audiences. As individual members, ACCLPP agrees with advocates that no safe level for lead can be defined. As a scientific advisory body, ACCLPP agrees with the scientific community that the evidence does not support lowering the BLL of concern from 10 µg/dL. Dr. Campbell agreed with Dr. Brown that ACCLPP's future documents should contain straightforward language and clear messages for the lay audience. She also noted that LPPB has posted a document on its web site outlining CDC's rationale not to lower the BLL of concern from 10 µg/dL. The document was targeted to the media, but could perhaps be tailored to parent organizations and other specific audiences in the lay public.

Dr. Stephens suggested that CDC engage national networks to visualize the lead problem to the lay public through public service announcements and other types of broadcasts. For example, a brief media clip could be aired in which a child with an EBLL in a lead hazardous home is featured. Educational messages to parents may have a stronger impact if deteriorated paint in the home is shown as a specific example of a lead hazard. Dr. Binns recommended that key points from ACCLPP and CDC documents be compiled and tailored as a parent fact sheet and posted on the CDC web site for access by health educators and other groups serving parents. The fact sheet could also contain a short list of key medical resources that can be broadly distributed throughout communities.

Ms. Kite pointed out that ACCLPP's suggestions solely place the burden of education on parents. She was aware of several cases in her community in which informed parents demanded blood lead testing of their children and were refused by providers. She emphasized the critical need to also educate the medical profession. Ms. Johnson agreed with these comments and added that ACCLPP and CDC materials also need to be clarified for other groups in addition to parent and community organizations. For example, some health departments or private providers may misinterpret the <10 Report to mean that primary prevention measures should not be taken for children with BLLs <10 µg/dL. Dr. Gitterman remarked that ACCLPP's comments also focus on web-based materials, but many persons in the target audience do not have Internet access. He suggested that ACCLPP and CDC closely partner with AAP, the American Academy of Family Medicine, public health associations and other professional organizations to more rapidly disseminate documents and communicate with target audiences.

Dr. Brown suggested that Ms. Kite and Ms. Johnson, ACCLPP's parent and community representatives, collaborate with LPPB staff in crafting clear and concise messages to the lay public. For example, materials could be developed that support the concept of a child's entitlement to a lead-safe environment even if the BLL is <10 µg/dL. Dr. Brown's position was that this type of language would be more acceptable to and endorsed by the lay public rather than the ongoing debate of a "safe" or "unsafe" threshold for lead. She planned on asking Ms. Nikki Walker of LPPB to coordinate conference calls with Ms. Kite and Ms. Johnson to begin focusing on this issue.

Drs. Handy and Campbell proposed that CDC engage a professional risk communicator in this effort and use CDC's media document as a basis for the discussion. ACCLPP was encouraged to submit suggestions to Dr. Brown on developing materials and effective messages for parent groups, community organizations and other audiences in the lay public.

## Public Comment Period

Mr. Boreiko made comments on non-housing lead sources. Nearly 50% of clinical lead intoxication cases among children may be related to products purchased abroad. Several industry and trade associations have launched a variety of voluntary initiatives to eliminate the use of lead in toys, food contact items and other non-essential sources. Some of the activities include monitoring and enforcement of a code of practice for these products. Mr. Boreiko offered to provide ACCLPP members with more information about the voluntary initiatives.

Mr. Morta announced that grantees in high-risk areas in California, Texas and other states have included approaches in screening plans and elimination strategies to address non-housing lead sources. He encouraged ACCLPP to access the LPPB web site to review the plans.

Dr. Friedman announced that HUD published a *Federal Register* notice on March 21, 2005 requesting proposals for its super notice of funding availability (NOFA). Deadlines for different NOFAs will be between June 7-15, 2005 and applications can be submitted to HUD electronically. HUD will allocate $93.6 million under the lead-based paint hazard control program with $3-$4 million awarded to individual grantees. Awards of $2-$4 million will be made to grantees in certain large urban areas with older housing and a high BLL prevalence under the lead hazard reduction demonstration project.

HUD's total NOFAs of >$160 million include the lead elimination action program, lead outreach activities, lead technical studies, the healthy homes demonstration project and healthy home technical studies. The NOFAs can be viewed on the HUD web site or

www.grants.gov. The FY'05 demonstration grants contain several new requirements. Each applicant must document its existing participation in or approaches to develop a new lead strategic plan in accordance with CDC guidelines. Applicants must demonstrate involvement with non-profit, community-based, faith-based or other grassroots organizations. Some NOFAs explicitly require applicants to document partnerships with parent organizations.

Ms. Rhonda Smith urged ACCLPP to hold future meetings at other grantee sites. She emphasized that the opportunity for LACLPPP and NOCLPPP to attend the meeting and participate in ACCLPP's deliberative process was extremely beneficial to both programs. LACLPPP and NOCLPPP will extensively discuss lessons learned from the ACCLPP meeting, particularly suggestions to develop lead elimination strategies, establish partnerships and create educational and outreach initiatives.

## Closing Session

The next ACCLPP meeting will be held on October 25-26, 2005 in Washington, DC. ACCLPP joined Dr. Campbell in thanking the LACLPPP and NOCLPPP staff for providing a warm reception for the New Orleans meeting.

With no further discussion or business brought before ACCLPP, Dr. Campbell adjourned the meeting at 12:36 p.m. on March 23, 2005.

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

7/4/05
Date

Carla C. Campbell, M.D., M.S.
ACCLPP Chair

## ATTACHMENT 1

## List of Participants

**ACCLPP Members**
Dr. Carla Campbell, Chair
Dr. Walter Handy, Jr.
Dr. Ing Kang Ho
Ms. Valarie Johnson
[via conference call]
Ms. Linda Kite
Dr. Jessica Leighton
Ms. Sally Odle
Dr. George Rhoads
Dr. Catherine Slota-Varma
Dr. Wayne Snodgrass
Dr. Kevin Stephens, Sr.

**Designated Federal Official**
Dr. Mary Jean Brown,
Executive Secretary

***Ex-Officio* and Liaison Members**
Dr. Helen Binns (AAP)
Dr. Warren Friedman (HUD)
Dr. Benjamin Gitterman (APHA)
Dr. Kristina Hatlelid (CPSC)
Mr. Steve Hays (AIHA)
Ms. Jacqueline Mosby (EPA)
Dr. George Rodgers (AAPCC)
Dr. Walter Rogan (NIH)
Mr. Robert Roscoe (NIOSH)
Dr. Phyllis Stubbs-Wynn (HRSA)

**CDC Representatives**
Ms. Crystal Gresham
Dr. David Homa
Mr. Penn Jacobs
Mr. Jeff Jarrett
Mr. Timothy Morta
Mr. David Mullen

**New Orleans and Louisiana CLPPP Representatives**
Ms. Joyce Burkett
Ms. Connie Daniels
Ms. Keywania Dinet
Ms. Willow Gray
Mr. Todd Griffin
Ms. Victoria Griffin
Ms. Ananda Hall
Mr. Patrick Hall
Mr. Charles Myers
Mr. Sherman Robinson
Ms. Rhonda Smith
Ms. Shirley Smith
Mr. Wes Taylor

**Presenters and Members of the Public**
Mr. Craig Boreiko (International Lead Zinc Research Organization, Inc.)
Ms. Jennie Epstein
(Harvard School of Public Health)
Jane Luxton, Esq. (King & Spalding)
Mr. Ajun Prasad (HHS)
Mr. Jan Van Esch
(Harvard School of Public Health)