

RECOMMENDATIONS

The focus in childhood lead-poisoning policy should shift from case identification and management to primary prevention, with a goal of safe housing for all children and adults (251). With this in mind, we suggest that the Galveston community, at high risk for lead exposure, work together to become a prototype for small cohesive community seeking to eliminate/eliminating a severe public health problem. We conclude by offering several specific recommendations, based primarily on initiatives in place elsewhere that are making a measurable difference:

- Appoint a “lead czar” and lead-elimination task force that would include representatives from public health, area residents, the Galveston Historical Foundation, the Galveston Board of Realtors, developers, the Galveston Independent School District, daycare centers, and others as appropriate. This formal collaboration is especially important in a smaller community such as Galveston, which may not be eligible for some federal funding based on number at risk. Such collaboration is therefore especially important not only for obtaining funding from multiple sources but also for putting in place a comprehensive and consistent lead-elimination plan and making it well known throughout the community. Ideally, this would be in the context of a Healthy Homes Initiative, of which lead-safe housing would be a key component.
- Institute an intensive media awareness campaign to ensure that all Galveston residents are fully aware of the problem and have easy access to fact sheets on testing, including a list of certified inspectors and interim controls. This information should be made available via television, radio, newspapers, clinic and physician offices, flyers sent home from schools, buses and other approaches as appropriate. Awareness should be the number one immediate goal. The majority of people simply do not yet know about the seriousness of lead exposure in general or the level of contamination in most of Galveston.
- Require blood-lead screening of all children within the city as a prerequisite for enrolling in day care or kindergarten, with all data made available to parents, the school system and the GCHD. Educational and psychosocial help should be available for all children with BLLs ≥ 5 $\mu\text{g}/\text{dL}$, possibly through volunteer organizations, and a list of investigative resources and actions to identify and reduce exposure should be provided to parents along with the blood-lead results. We would suggest that the screening be done at local schools and that a donation of \$20 be suggested for those able to pay. Our conversations with area residents suggest that most would welcome easy mandatory screening and most would be willing to pay.
- Require testing by a certified inspector of all residential buildings (exterior and interior), tap water and surrounding soil, with the results made available, along with the “Addendum for Seller’s Disclosure of Information on Lead-Based Paint and Lead-Based Paint Hazards as Required by Federal Law” and an approved brochure on lead exposure before selling or renting any residential property.
- Phase-in a program that would prohibit the sale or rental of any residential property unless certified lead-safe by a reputable laboratory. Sales could also be conditional on establishment of an escrow account with lead-abatement within a certain period after sale, usually six months, with no habitation until certified lead-safe.
- Require testing by a certified inspector of all schools, day care centers, playgrounds and other areas where children spend large amounts of time as part of the permitting process. Such facilities would have to be certified lead-safe before use.
- Increase awareness and enforcement of the City of Galveston’s current “Lead Abatement” regulations, which apply to all pre-1978 residential and commercial buildings and require a number of measures—including extensive use of dropcloths and restrictions on the use of power-assisted equipment—to protect soil and neighborhoods from lead contamination during exterior paint removal. The regulation includes up to a \$2,000 per day fine for noncompliance.
- Expand the City of Galveston’s “Lead Abatement” regulations to include interior lead-abatement activities, based on regulations in place elsewhere, which generally include pre-renovation testing by a certified laboratory; use of workers certified in lead-abatement activities or completion of a lead-abatement course by homeowners doing their own work; protection of workers and residents from exposure during interior paint removal, which generally includes prohibiting habitation in a structure during lead-abatement (children especially should not be in a home during renovation); written information on lead poisoning for workers, residents and neighbors for any pre-1978 renovation; and post-renovation certification by a qualified inspector that the structure is lead-safe before habitation.
- Add the City of Galveston’s lead abatement regulations to its “Design Standards for Historic Properties of Galveston, Texas” (67) and to its website for easy access.
- Create several lead-safe houses, possibly in collaboration with the Galveston Historical Foundation or Section 8 public housing, where families can move during lead-abatement in their homes or apartments.

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- Increase funding for the GCHD, as outlined in “Childhood Lead Poisoning Prevention: A Program Plan for Galveston County” (154), to enable the GCHD to do more outreach, blood-lead screening and environmental inspections, as well as to participate fully in the CDC’s STELLAR and the TX CLPPP’s surveillance programs.
- Require prenatal screening of blood-lead for pregnant high-risk women, with recommendations for reducing current exposure and bone-leaching.
- Consider legal action against makers of lead-based paint as has been done in a number of other communities with less of a lead-poisoning problem than Galveston. St. Louis, Milwaukee, Philadelphia, New Orleans, Chicago, Oakland, San Francisco and the New York Housing Authority have pending lawsuits and Rhode Island settled in 1998 with three paint companies for \$206 million to remove lead-paint hazards from public buildings accessible to children. Most of the lawsuits seek to recover public money spent on screening, education and lead abatement.

- Encourage federal funding support of smaller communities with demonstrated lead remediation needs.

We recommend that the Galveston community begin immediately to implement programs aimed at eliminating lead exposure in home, public space and work environments, using this public health emergency as a rallying point for the community and to create an example that will generate positive publicity for Galveston and possibly serve as a prototype for other similar communities in the U.S. This is a preventable disease and the cost of lead abatement is dramatically lower than the health, social and human cost of continuing, knowingly, to poison our children. By the time a child is identified as having elevated lead levels, irrevocable damage has been done that will exist throughout that child’s lifetime and is likely to affect his or her children as well. Screening for elevated lead—although still needed—is too late. Prevention is key.

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* Website addresses are given as a convenience to the reader and were functional at the time of publication.

USEFUL RESOURCES

(alphabetical)

Agency for Toxic Substances & Disease Registry

1600 Clifton Road NE
Atlanta, GA 30333
1.888.42.ATSDR (1.888.422.8737)
www.atsdr.cdc.gov

Description: Provides health information to prevent harmful exposures and diseases related to toxic substances.

Documents of Particular Interest:

- ToxFAQs for Lead
www.atsdr.cdc.gov/tfacts13.html
- 2005 Toxicological Profile for Lead
www.atsdr.cdc.gov/toxprofiles/tp13.pdf
or www.atsdr.cdc.gov/toxprofiles/tp13.html

Galveston County Health District, Epidemiology Services

(Blood Lead Screening)
PO Box 939
La Marque, TX 77568
409.938.2322 or 800.705.8868
www.gchd.org/epidemiology/bloodlead.htm

Description: Provides guidance for blood lead screening in Galveston.

Galveston Historical Foundation

1861 Custom House
502 20th Street
Galveston, TX 77550
409.765.7834
www.galvestonhistory.org

Description: One of the nation's largest local preservation organizations. The foundation also addresses community redevelopment and public education.

Documents of Particular Interest:

- Preservation links:
www.galvestonhistory.org/Presevation_Links.asp
- Places to visit map:
www.galvestonhistory.org/plc-map.asp

Harris County Hospital District: Health Fairs

Phone: 713.566.6718
Fax: 832.487.2081
www.hchdonline.com/health/healthfairs.htm

Description: Provides information regarding health fairs in Harris County.

Houston Department of Health and Human Services (HDHHS)

Childhood Lead Poisoning Prevention Program (CLPPP)

Phone 713.794.9349
www.houstontx.gov/health/Environmental/childhood.html

Description: Provides blood lead testing for children, com-

munity outreach and education, environmental investigation and case management.

Documents of Particular Interest:

- The ABC's of Lead Screening for Children: A Quick Reference for Medical Providers
www.houstontx.gov/health/Community/abcART.pdf

National Center for Healthy Housing (NCHH)

10320 Little Patuxent Parkway, Suite 500
Columbia, MD 21044
www.centerforhealthyhousing.org

Description: Promote practical methods to protect children from environmental hazards while preserving affordable housing.

Documents of Particular Interest:

- Links to latest lead research and program evaluations:
www.centerforhealthyhousing.org/html/research.htm
- The following are some of the publications available at
www.centerforhealthyhousing.org/html/info_for_you.htm
Lead Paint Can Poison: Tenants at Risk
Lead Paint Can Poison: Is Your Family at Risk?
How to Check for Lead Hazards in Your Home
Finding a Qualified Lead Professional
Lead Paint Can Poison: Protect Your Family When You Repaint or Remodel
Cleaning Lead-Contaminated Dust
Selecting a Lead Laboratory

National Conference of State Legislatures Lead Statutes Database

Interactive legal database by state and legal topic (e.g., property maintenance, certification and licensing, enforcement, abatement, and screening/reporting) that allows one to easily find the lead legislation in place in each state.

www.ncsl.org/programs/environ/health/leadStatutesdb.cfm

National Environmental Education Foundation (NEEF)

4301 Connecticut Avenue NW, Suite 160
Washington, DC 20008
Phone: 202.833.2933
Fax: 202.261.6464

www.neefusa.org/index.htm

Description: NEEF works with a network of health professionals, weathercasters, land managers and teachers to create and leverage public-private partnerships and to promote daily actions for helping people live well while protecting and enjoying nature.

Documents of Particular Interest:

- A one-page Pediatric Environmental History form for children: www.neefusa.org/pdf/PedEnvHistoryScreening.pdf. See Appendices.
- A three-page "Pediatric Environmental History" form with additional categories and questions to supplement the first form: www.neefusa.org/pdf/PEHHistory.pdf

USEFUL RESOURCES

National Register of Historic Places, National Park Service

1201 Eye Street, NW
Washington, DC 20005
202.354.2213

www.nps.gov/nr/index.htm

Description: Has a complete “official list of cultural resources worthy of preservation.” Included in the list are districts, sites, buildings, structures, objects significant in American history, architecture, archeology, engineering, and culture.

Documents of Particular Interest:

- A searchable database that includes all of Galveston’s historic areas: www.nr.nps.gov/nrloc1.htm (select “State and City” and enter TX, Galveston).

National Register of Historic Places: TEXAS – Galveston County – Historic Districts

www.nationalregisterofhistoricplaces.com/TX/Galveston/districts.html

Description: Lists the historic districts of Galveston, with architectural and historically significant details.

Southwest Center for Pediatric Environmental Health (SWCPEH)

The University of Texas Health Center at Tyler
11937 U.S. Highway 271

Tyler, TX 75708-3154

Toll-free: 888.901.5665 (AR, LA, NM, OK, and TX only)

Administrative number and calls from outside the region:
903.877.5884

www.swcpeh.org

Description: Based in Tyler, Texas, SWCPEH aims to educate pediatric health care providers and the general public to better serve the health needs of children affected by environmental exposures through education programs and 24-hour telephone consultation. Services are offered at no charge. A list of services is located at www.swcpeh.org/home_services.asp.

Texas Department of State Health Services Childhood Lead Poisoning Prevention Program (CLPPP)

1100 W. 49th Street
Austin, Texas 78756
800.588.1248

www.dshs.state.tx.us/lead

Description: The TX CLPPP’s mission is to partner with local and regional health departments; city, state, and federal agencies; and other community organizations to protect Texas children from lead poisoning. The website provides numerous materials for physicians, parents and others, as well as contact information for local CLPPP programs.

Documents of Particular Interest:

- Pb-110 Risk Assessment for Lead Exposure
www.dshs.state.tx.us/lead/pdf_files/pb_110_parent_questionnaire.pdf
- Pb-101: Request for Environmental Investigation
www.dshs.state.tx.us/lead/pdf_files/pb_101_ei_request.pdf
- Pb-104: Physician Checklist for Parent Education Topics
www.dshs.state.tx.us/lead/pdf_files/pb_104_PhyChecklist.pdf
- 1-313: Childhood Blood Lead Testing: Getting a Good Specimen
www.dshs.state.tx.us/lead/pdf_files/specimen_poster.pdf
- Protect Your Children From Lead Poisoning
www.dshs.state.tx.us/lead/pdf_files/1_26_eng.pdf [English]
www.dshs.state.tx.us/lead/pdf_files/1_26a_spn.pdf [Spanish]
- Lead in the Workplace and at Home
www.dshs.state.tx.us/lead/pdf_files/1_309_eng.pdf [English]
www.dshs.state.tx.us/lead/pdf_files/1_309_spn.pdf [Spanish]
- Toward a Lead-Safe Texas: Texas Strategic Plan to Eliminate Child Lead Poisoning By 2010
www.dshs.state.tx.us/lead/pdf_files/tx_clppp_sp_07.pdf

Texas Department of State Health Services Environmental Lead Program (ELP)

1100 W. 49th Street

Austin, TX 78756-3199

Toll-free in Texas: 1.888.778.9440 ext 2434

Outside of Texas: 512.834.6773 ext 2434

www.dshs.state.tx.us/elp

Description: Oversees procedures for lead inspections, lead risk assessments, and lead abatement in pre-1978 buildings. Provides downloadable forms and information regarding requirements, certification, and exams.

Documents of Particular Interest:

- Guidelines for Remodeling a Home
www.dshs.state.tx.us/elp/pdf/Renovation.pdf
- Texas Rules and HUD Rehab Projects
www.dshs.state.tx.us/elp/pdf/HUDRehabProjects.pdf
- Certification Requirements
www.dshs.state.tx.us/elp/pdf/certreq.pdf
- List of Lead Inspectors
www.dshs.state.tx.us/elp/PDF/PB_INSP.pdf
- List of Lead Risk Assessors
www.dshs.state.tx.us/elp/PDF/PB_RISKA.pdf

U.S. Centers for Disease Control and Prevention (CDC) Childhood Lead Poisoning Prevention Branch

4770 Buford Highway

Atlanta, GA 30341

770.488.3300

www.cdc.gov/nceh/lead

Description: Provides funding, support and training to state and local lead-poisoning prevention programs and collects childhood blood lead surveillance data. The CDC website also posts the latest childhood lead threats, along with screening and case management guidelines.

USEFUL RESOURCES

Documents of Particular Interest:

- Preventing Lead Poisoning in Young Children
www.cdc.gov/nceh/lead/publications/PrevLeadPoisoning.pdf
- Building Blocks for Primary Prevention: Protecting Children from Lead-Based Paint Hazards
www.cdc.gov/nceh/lead/publications/Building_Blocks_for_Primary_Prevention.pdf
- Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials
www.cdc.gov/nceh/lead/guide/guide97.htm
- Preventing Lead Poisoning in Young Children
www.cdc.gov/nceh/lead/publications/PrevLeadPoisoning.pdf
- Managing Elevated Blood Lead Levels Among Young Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention
www.cdc.gov/nceh/lead/CaseManagement/caseManage_chap1.htm
- Lead Poisoning Prevention Program: State and Local Programs
www.cdc.gov/nceh/lead/grants/contacts/CLPPP%20Map.htm

U.S. Consumer Product Safety Commission (CPSC)

4330 East West Highway

Bethesda, MD 20814

Phone: 1.800.638.2772; TDD: 1.800.638.8270

www.cpsc.gov

Description: Provides information on unsafe products

Documents of Particular Interest:

- Searching for the key word “lead” will yield the latest articles and information regarding lead in consumer products.

U.S. Department of Housing and Urban Development (HUD) Office of Healthy Homes and Lead Hazard Control (OHHLHC)

422 South Clinton Avenue

Rochester, NY 14620

www.hud.gov/offices/lead

Description: The OHHLHC provides public outreach and technical assistance, enforcement of HUD’s lead-based paint regulations, examples of successful lead-reduction case histories, and funding to state and local governments to reduce lead-based paint hazards.

Documents of Particular Interest:

- HUD Technical Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing
This resource includes chapters on inspections, interim controls, encapsulation, renovation of historic structures and other useful information.
www.hud.gov/offices/lead/guidelines/hudguidelines
- Lead-Safe Housing Rule
This rule applies to all housing that is federally owned and housing receiving Federal assistance.
www.hud.gov/offices/lead/leadsaferule
- Dr. Edward Pringle, Field Office Director
1301 Fannin, Suite 2200
Houston, TX 77002
Hours: 7:45 am to 4:30 pm, Monday – Friday
713.718.3199
TTY: 713.718.3289

U.S. Environmental Protection Agency (EPA)

Office of Pollution Prevention & Toxics

1200 Pennsylvania Avenue, NW

Washington, DC 20460

202.566.0500

www.epa.gov/lead

Description: Provides numerous resources online, including publications in English and Spanish with suggestions on how to protect children from exposure.

Resources of Particular Interest:

- U.S.EPA National Lead Information Center (NLIC Lead Hotline) 1.800.424.LEAD [5323].
Speak with a lead specialist Monday through Friday, 8:00 am to 6:00 pm eastern time (except Federal holidays).
Recorded message system available in English and Spanish 24 hours a day, seven days a week
- Testing Your Home for Lead in Paint, Dust And Soil [18-page booklet] www.epa.gov/lead/pubs/leadtest.pdf
- Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work
www.epa.gov/lead/pubs/leadsafetybk.pdf

ABBREVIATIONS

(alphabetical)

AAP: American Academy of Pediatrics

ALAD: delta-aminolevulinic acid dehydratase

ATSDR: U.S. Agency on Toxic Substances and Disease Registry

B cells: B lymphocytes (a type of white blood cell)

BCM-EHS: Baylor College of Medicine Environmental Health Section

BLL: blood lead level

CDC: U.S. Centers for Disease Control and Prevention

CI: confidence interval

CNS: central nervous system

CPSC: U.S. Consumer Product and Safety Commission

CLPPP: Childhood Lead Poisoning and Prevention Program

DHHS: U.S. Department of Health and Human Services

EDTA: ethylene diamine tetra-acetic acid

EHNG: Environmental Health Notifications Group in Austin, TX

ELP: Texas Environmental Lead Program

EPA: United States Environmental Protection Agency

ESRD: end-stage renal disease

GCAD: Galveston Central Appraisal District

GCHD: Galveston County Health District

GFAAS: graphic furnace atomic absorption spectroscopy

GLMM: generalized linear mixed model

GSH: tripeptide glutathione

GSSG: glutathione disulfide

H-GAC: Houston-Galveston Area Council

HCPHES: Harris County Public Health and Environmental Services Department

HDHHS: City of Houston Department of Health and Human Services

HIPAA: Health Insurance Portability and Accountability Act

HUD: U.S. Department of Housing and Urban Development

IARC: International Agency for Research on Cancer

ICP-MS: inductively coupled plasma/mass spectrometry

IgG, IgM, IgA: immunoglobulins important in immune response

IRB: Institutional Review Board

KXRF: K X-ray fluorescence [for bone-lead testing]

LA-ICP-MS: laser ablation-inductively coupled plasma-mass spectrometry

LOD: Level of detection

µg/dL: micrograms per deciliter

MDI: Many Diversified Interests superfund site in the 5th Ward, Houston, TX

MMWR: Morbidity and Mortality Weekly Report

MRI: magnetic resonance imaging

MRS: magnetic resonance spectroscopy

NEEF: National Environmental Education Foundation

NHANES: National Health and Nutrition Examination Survey

NK cells: natural killer cells, a type of white blood cell

NLMS: National Longitudinal Mortality Study

NPL: National priority listing [superfund site]

OSHA: U.S. Occupational Safety and Health Administration

PCL: protective critical levels

PBG: porphobilinogen

pRBCs: packed red blood cells

ROS: reactive oxygen species

SF1: Summary File 1 from the U.S. Census (actual count data)

SF3: Summary File 3 from the U.S. Census (extrapolation from 1 in 6 sample)

SMR: standardized mortality ratio

STAR*Map: Southeast Texas Addressing and Referencing Map

SWCPEH: Southwest Center for Pediatric Environmental Health

T cells: T lymphocytes (a type of white blood cell)

TCEQ: Texas Commission on Environmental Quality

TDSHS: Texas Department of State Health Services

TELRR: Texas Environmental Lead Reduction Rules

TRRP: Texas Risk Reduction Program

UTMB: University of Texas Medical Branch

U.S.: United States

WIC: Special Supplemental Nutrition Program for Women, Infants, and Children

WML: white matter lesions

XRF: X-Ray fluorescence [for testing paint]

DANGER

U.S. ENVIRONMENTAL PROTECTION AGENCY



**CONTAMINATED
NO TRESPASSING**

VIOLATORS WILL BE PROSECUTED



**CONTAMINADA
NO TRASPASAR**

VIOLADORES SERAN PROCESADOS

1-800-EPA-SPIL

SITE ID#

TXD008083404

Appendix 1

This one-page Pediatric Environmental History screening form from the National Environmental Education Foundation can be downloaded from www.neefusa.org/pdf/PedEnvHistoryScreening.pdf and is designed to be administered in less than 5 minutes. A two-page form that includes several questions about lead exposure can be downloaded from www.neefusa.org/pdf/PEHHistory.pdf.

Pediatric Environmental History (0-18 Years of Age) *The Screening Environmental History*

For all of the questions below, most are often asked about the child's primary residence. Although some questions may specify certain locations, one should always consider all places where the child spends time, such as daycare centers, schools, and relative's houses.

Where does your child live and spend most of his/her time?	_____
What are the age, condition, and location of your home?	_____
Does anyone in the family smoke?	☐ Yes ☐ No ☐ Not sure
Do you have a carbon monoxide detector?	☐ Yes ☐ No ☐ Not sure
Do you have any indoor furry pets?	☐ Yes ☐ No ☐ Not sure
What type of heating/air system does your home have?	
☐ Radiator ☐ Forced air ☐ Gas stove ☐ Wood stove ☐ Other _____	
What is the source of your drinking water?	
☐ Well water ☐ City water ☐ Bottled water	
Is your child protected from excessive sun exposure?	☐ Yes ☐ No ☐ Not sure
Is your child exposed to any toxic chemicals of which you are aware?	☐ Yes ☐ No ☐ Not sure
What are the occupations of all adults in the household?	_____
Have you tested your home for radon?	☐ Yes ☐ No ☐ Not sure
Do you have any other questions or concerns about your child's home environment or symptoms that may be a result of his or her environment?	_____

Follow up/ Notes

This screening environmental history is designed to capture most of the common environmental exposures to children. The screening history can be administered regularly during well-child exams as well as to assess whether an environmental exposure plays a role in a child's symptoms. If a positive response is given to one or more of the screening questions, the primary care provider can consider asking further questions on the topic provided in the Additional Categories and Questions to Supplement the Screening Environmental History.

The Screening Environmental History is taken in part from the following sources:

- American Academy of Pediatrics Committee on Environmental Health. Pediatric Environmental Health 2nd ed. Etzel RA, Balk SJ, Eds. Elk Grove Village, IL: American Academy of Pediatrics; 2003. Chapter 4: How to Take an Environmental History.
- Balk SJ. The environmental history: asking the right questions. *Contemp Pediatr*. 1996;13:19-36.
- Frank A, Balk S, Carter W, et al. Case Studies in Environmental Medicine. Agency for Toxic Substances and Disease Registry, Atlanta GA. 1992, rev. 2000. Taking an Exposure History.



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APPENDICES

Appendix 2

Texas Department of State Health Services Form Pb-100: Lead Assessment Interview Tool to be used with parents of a child with elevated lead levels. This form and other useful forms for physicians, educators and parents are available for downloading from www.dshs.state.tx.us/lead/providers.shtm.



Form Pb-100: Lead Assessment Interview Tool

This form is used by a health-care provider to interview the parent/guardian of a child with a confirmed elevated blood lead level to determine possible source(s) of exposure.

Please return in the attached preaddressed postage paid envelope.

Child's Name:		DOB:		Medicaid No:	
Residential Address:					
Informant's Name and Relationship:					
Home Phone: ()		Work Phone: ()			
Provider Address:					
Provider Phone: ()					
Interviewer:		Date of Interview:			

1. Was your home probably built before 1978? ☐ Yes ☐ No
¿Se construyó su casa probablemente antes de 1978?
2. How long have you lived at this address?
¿Cuánto tiempo ha vivido en esta dirección?
3. What was your previous address?
¿Cuál era su dirección anterior?
4. Is there any peeling paint on the outside or inside of your home? ☐ Yes ☐ No
¿Hay pintura desprendida en tiras dentro o fuera de su hogar?
5. Has any recent remodeling of your home involved paint removal or the use of old or recycled lumber? ☐ Yes ☐ No
¿Ha habido renovaciones recientes de su hogar que hayan involucrado el removimiento de pintura o el uso de maderas viejas o recicladas?
6. Does your child spend time at any other building (daycare center, Grandparent's house, neighbor's house, etc.) that was probably built before 1978 or that has had recent renovations? ☐ Yes ☐ No
¿Pasa su niño o niña tiempo en algún otro edificio (centro de guardería, de los abuelos, casa de vecinos, etc.) que probablemente halla sido construido antes de 1978 o que haya tenido renovaciones recientes?
7. Does anyone in your family use alternative, traditional, or home remedies, such as Greta, Azarcon, Maria Luisa, or Pay-loo-ah? ☐ Yes ☐ No
¿Hay alguno de su familia que use remedios alternativos, tradicionales, o caseros, como Greta, Azarcon, Maria Luisa, o Pay-loo-ah?

8. Does your child put non-food items, like paint or dirt, in his or her mouth? ¿Se lleva a la boca, su niño o niña, cosas no comestibles (como pintura o tierra)? 9. If your house is heated by a wood-burning stove or fireplace, is painted wood burned as fuel? Si calienta usted su casa con estufa de leña o chimenea ¿Quema usted madera recubierta de pintura como combustible? 10. Does anyone in your home make bullets, make fishing weights, make stained glass, make or glaze pottery, or work on autos near the house? ¿Alguien en su hogar manufactura balas, pesas para cañas de pescar, vidrio de colores; que manufacture o aplique vidriado a la cerámica o que arregle autos cerca de la casa? 11. Where are members of your household employed? ¿En dónde trabajan los miembros de su familia? What is their main job? ¿Principalmente en qué trabajan? 12. Are acid-containing foods like fruit juices stored in pottery, porcelain, pewter, leaded crystal, or cans? ¿Almacena usted comida de alto contenido de ácido, como jugos de fruta, en recipientes de barro, porcelana, peltre, cristal de plomo, o en latas? 13. Do you cook or store food in a bean pot or in pottery that is glazed? ¿Cocina o guarda usted comida en olla para frijoles, en alfarería recubierta con vidriado que contenga plomo? 14. Are there factories near the place where your child spends most of his time? ¿Se encuentran fábricas cerca del lugar en donde su niño o niña pasa la mayor parte del tiempo? 15. Have other members of the family or any of your child's friends had high blood lead levels? ¿Han tenido otros miembros de la familia o cualquiera de los amigos de sus niños altos niveles de plomo en la sangre? If yes, who? ¿Si su respuesta fué sí, quienes?	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No
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For further information, refer to the attached Physician Reference on Follow-up Testing and Case Management and/or contact the statewide Follow-Up Coordinator at 1-800-588-1248.

APPENDICES

Appendix 3

Texas Department of State Health Services Texas Childhood Lead Poisoning Prevention Program Form #F09-11709 Childhood Blood Lead Level Report. This form must be submitted for all blood levels obtained on Texas residents. Available from www.dshs.state.tx.us/lead/pdf_files/blood_lead_report.pdf.



Texas Childhood Lead Poisoning Prevention Program

Form # F09-11709 Childhood Blood Lead Level Report

Confidential Medical Records

Send to: Childhood Lead Poisoning Prevention Program Texas Department of State Health Services 1100 West 49th Street Austin, TX 78756 Fax Number: (512) 458-7699 Phone Number: (512) 458-7269 or (800) 588-1248	From: Provider Name Address: City/State/ZIP: Phone Number: () Fax Number: ()
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Child Information		
Last Name:	First Name:	M.I.
Date of Birth: (mm-dd-yyyy)	Gender: ☐ Male ☐ Female	
Age in Months:	Medicaid/EPSTD #:	
Current Address:	Apartment #:	
City:	State:	Zip:
Ethnicity: (check one)		
☐ Hispanic	☐ Non-Hispanic	☐ Unknown
Race: (check one)		
☐ White	☐ Black	☐ Native American or Alaska Native
☐ Asian or Pacific Islander	☐ Multi-Racial	☐ Unknown

Blood Lead Level Information	
Blood Lead Test Level: _____ micrograms per deciliter (µg/dL)	Test Date: (mm-dd-yyyy)
Type of Blood Sample: (check one)	If Using LeadCare System, Place Label Here
☐ Capillary ☐ Venous ☐ Unknown	
Testing Laboratory:	
Laboratory Phone: ()	

Attending Physician Information	
Last Name:	First Name:
Location (City):	

For TX CLPPP Use Only	
Report Received by:	Date Received: (mm-dd-yyyy)



Texas Childhood Lead Poisoning Prevention Program • <http://www.dshs.state.tx.us/lead>

#F09-11709 08-06

APPENDICES

Appendix 4

“Addendum for Seller’s Disclosure of Information on Lead-Based Paint and Lead-Based Paint Hazards as Required by Federal Law.” All Galveston buyers, sellers and renters of pre-1978 property must receive an approved pamphlet on lead poisoning on lead as well as this disclosure and acknowledgement form. The form can be downloaded from www.trec.state.tx.us/pdf/contracts/OP-L.pdf.



APPROVED BY THE TEXAS REAL ESTATE COMMISSION 02-09-2004

**ADDENDUM FOR SELLER’S DISCLOSURE OF INFORMATION
ON LEAD-BASED PAINT AND LEAD-BASED PAINT HAZARDS
AS REQUIRED BY FEDERAL LAW**

CONCERNING THE PROPERTY AT _____
(Street Address and City)

A. LEAD WARNING STATEMENT: “Every purchaser of any interest in residential real property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in residential real property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller’s possession and notify the buyer of any known lead-based paint hazards. A risk assessment or inspection for possible lead-paint hazards is recommended prior to purchase.”

NOTICE: Inspector must be properly certified as required by federal law.

B. SELLER’S DISCLOSURE:

1. PRESENCE OF LEAD-BASED PAINT AND/OR LEAD-BASED PAINT HAZARDS (check on box only):
 - ☐ (a) Known lead-based paint and/or lead-based paint hazards are present in the Property (explain): _____
 - ☐ (b) Seller has no actual knowledge of lead-based paint and/or lead-based paint hazards in the Property.
2. RECORDS AND REPORTS AVAILABLE TO SELLER (check one box only):
 - ☐ (a) Seller has provided the purchaser with all available records and reports pertaining to lead-based paint and/or lead-based paint hazards in the Property (list documents): _____
 - ☐ (b) Seller has no reports or records pertaining to lead-based paint and/or lead-based paint hazards in the Property.

C. BUYER’S RIGHTS (check one box only):

- ☐ 1. Buyer waives the opportunity to conduct a risk assessment or inspection of the Property for the presence of lead-based paint or lead-based paint hazards.
- ☐ 2. Within ten days after the effective date of this contract, Buyer may have the Property inspected by inspectors selected by Buyer. If lead-based paint or lead-based paint hazards are present, Buyer may terminate this contract by giving Seller written notice within 14 days after the effective date of this contract, and the earnest money will be refunded to Buyer.

D. BUYER’S ACKNOWLEDGMENT (check applicable boxes):

- ☐ 1. Buyer has received copies of all information listed above.
- ☐ 2. Buyer has received the pamphlet *Protect Your Family from Lead in Your Home*.

E. BROKERS’ ACKNOWLEDGMENT: Brokers have informed Seller of Seller’s obligations under 42 U.S.C. 4852d to: (a) provide Buyer with the federally approved pamphlet on lead poisoning prevention; (b) complete this addendum; (c) disclose any known lead-based paint and/or lead-based paint hazards in the Property; (d) deliver all records and reports to Buyer pertaining to lead-based paint and/or lead-based paint hazards in the Property; (e) provide Buyer a period of up to 10 days to have the Property inspected; and (f) retain a completed copy of this addendum for at least 3 years following the sale. Brokers are aware of their responsibility to ensure compliance.

F. CERTIFICATION OF ACCURACY: The following persons have reviewed the information above and certify, to the best of their knowledge, that the information they have provided is true and accurate.

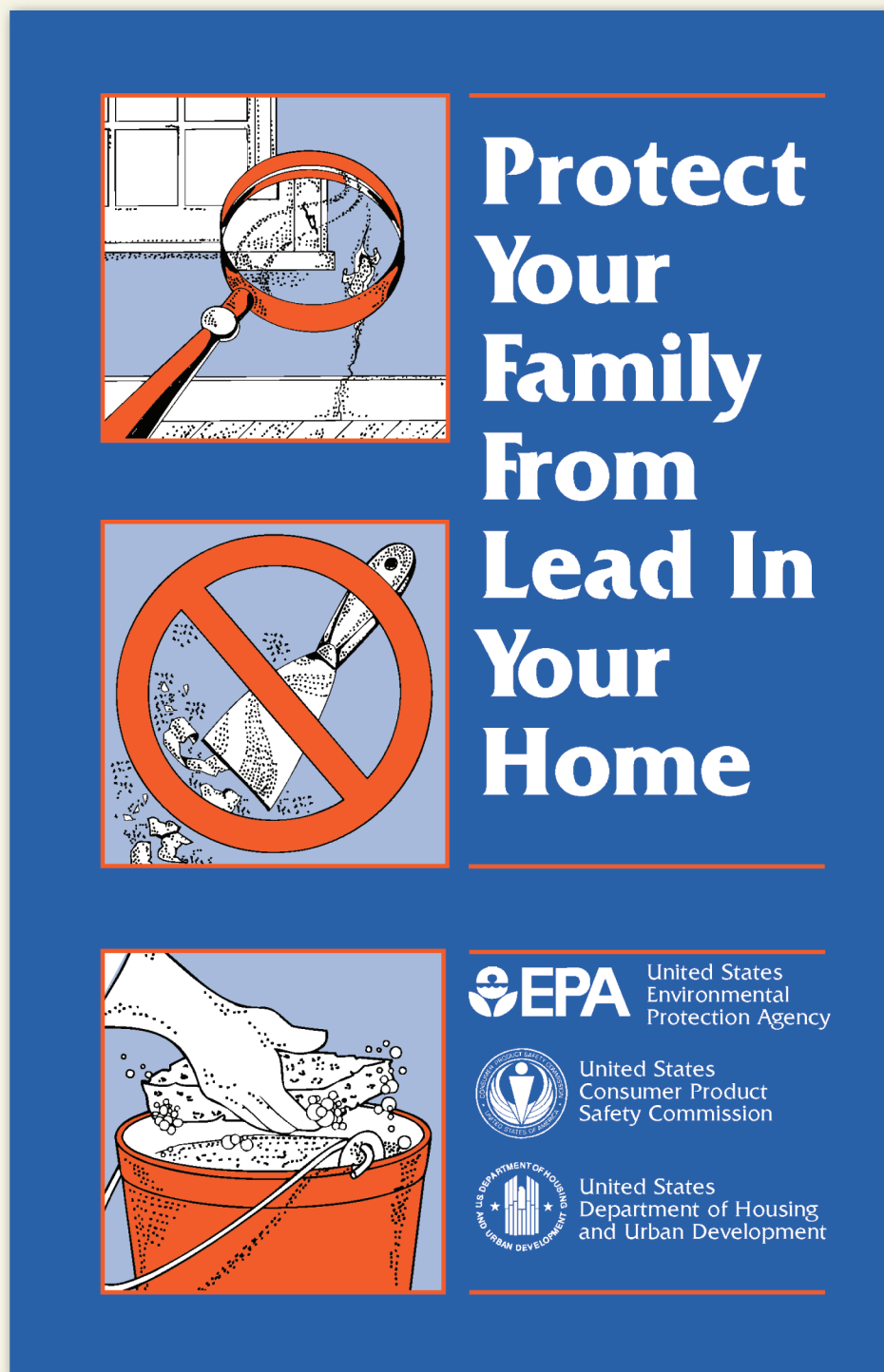
Buyer	Date	Seller	Date
Buyer	Date	Seller	Date
Other Broker	Date	Listing Broker	Date

The form of this addendum has been approved by the Texas Real Estate Commission for use only with similarly approved or promulgated forms of contracts. Such approval relates to this contract form only. TREC forms are intended for use only by trained real estate licensees. No representation is made as to the legal validity or adequacy of any provision in any specific transactions. It is not suitable for complex transactions. Texas Real Estate Commission, P.O. Box 12188, Austin, TX 78711-2188, 1-800-250-8732 or (512) 459-6544 (<http://www.trec.state.tx.us>)

Form OP-L 01A

Appendix 5

Front and back covers from a 13-page approved pamphlet on lead poisoning produced by the U.S. Environmental Protection Agency, U.S. Department of Housing and Urban Development and U.S. Consumer Product and Safety Commission. This pamphlet must be given to all potential buyers and renters of pre-1978 property in Texas. The pamphlet can be downloaded from www.epa.gov/lead/pubs/leadpdf.pdf.



Simple Steps To Protect Your Family From Lead Hazards

If you think your home has high levels of lead:

- ◆ Get your young children tested for lead, even if they seem healthy.
- ◆ Wash children's hands, bottles, pacifiers, and toys often.
- ◆ Make sure children eat healthy, low-fat foods.
- ◆ Get your home checked for lead hazards.
- ◆ Regularly clean floors, window sills, and other surfaces.
- ◆ Wipe soil off shoes before entering house.
- ◆ Talk to your landlord about fixing surfaces with peeling or chipping paint.
- ◆ Take precautions to avoid exposure to lead dust when remodeling or renovating (call 1-800-424-LEAD for guidelines).
- ◆ Don't use a belt-sander, propane torch, high temperature heat gun, scraper, or sandpaper on painted surfaces that may contain lead.
- ◆ Don't try to remove lead-based paint yourself.



Recycled/Recyclable

Printed with vegetable oil based inks on recycled paper
(minimum 50% postconsumer) process chlorine free.

Appendix 6

Brochure for the Essentials for Healthy Homes Practitioners Course. The City of Houston Department of Health and Human Services, in partnership with the University of Texas School of Public Health in Houston, is a training partner and offers regular courses in the Houston-Galveston area that are open to all interested individuals. For more information, visit www.healthyhomestraining.org. Lead abatement is among the subjects covered. In addition to the Essentials course, three other courses are available.

National Healthy Homes Training Center & Network



Essentials for Healthy Homes Practitioners Course

If you visit homes to provide health or inspection services of any type, you will benefit from the *Essentials for Healthy Homes Practitioners Course*. The training will help you understand the connection between health and housing and how to take a holistic approach to identify and resolve problems, which threaten the health and well-being of residents.

Everyone from a public health nurse visiting a client to an environmental health professional doing a rodent inspection will gain insight into how housing and health are related and actions they can take to improve the health of their clients. This two-day course brings together professionals with a variety of perspectives and experiences in a series of exercises — keeping the training lively and engaging.

The training complements hazard-specific training in lead-based paint, radon, mold, pests, and asbestos. It identifies root causes of health problems in a home and links them to seven principles of healthy housing: keep it dry; keep it clean; keep it pest-free; keep it ventilated; keep it safe, avoid contaminants; and maintain the house. Course participants will have a better understanding how to collaborate to make healthy homes a reality in their community.

For more information on the course, visit www.healthyhousing.org/training/ or contact Susan Aceti at 877.312.3046 ext 2780 or saceti@centerforhealthyhousing.org



National Center for Healthy Housing

Building a healthy home environment for all children

10227 WINCOPIN CIRCLE, SUITE 200, COLUMBIA, MARYLAND 21044
410.992.0712 FAX 410.715.2310
www.centerforhealthyhousing.org

Who Should Attend?

- Environmental Health Professionals
- Housing Inspectors
- Public Health Nurses
- Energy Auditors
- Licensed Home Inspectors
- Lead Risk Assessors
- Health and Housing Advocates
- Property Managers
- Pest Control Operators
- Lead Poisoning Case Managers
- Community-Based Organization Staff
- Weatherization Specialists

Practitioner's Course Outline

Day 1

- Overview
- Start With People
- The House as a System
- Keep It Dry
- Keep It Clean
- Keep It Pest-Free

Day 2

- Keep It Ventilated
- Keep It Safe
- Avoid Contaminants
- Maintain the House
- Making It Work

Course include interactive exercises. Presentations available on-line at www.healthyhomestraining.org.



National Healthy Homes Training Center & Network

What is a Healthy Home?

A *healthy home* is a home designed, constructed, maintained, or rehabilitated in a manner that supports the health of residents. The concept of healthier housing is receiving considerable attention from public health and housing communities. A growing body of evidence links housing conditions to health outcomes such as asthma, lead poisoning, lung cancer, and unintentional injuries.

Any home may have health hazards. Yet, there are more than six million substandard housing units nationwide. Addressing the health hazards in these substandard units presents a significant opportunity to improve public health. Creating healthier housing promotes the growth and development of our children and can save billions of dollars in health care costs.

The National Healthy Homes Training Center & Network brings together public health and housing practitioners to promote practical and cost-effective methods for making homes healthier. It also serves as a forum for exchanging information on new research and best practices.

The Training Center is funded by a grant from the U.S. Centers for Disease Control & Prevention, with support from the U.S. Department of Housing & Urban Development, and the U.S. Environmental Protection Agency.

For more information on the course, visit www.healthyhomestraining.org or contact Susan Aceti at 410.772.2780 or saceti@centerforhealthyhousing.org



National Center for Healthy Housing

10227 WINCOPIN CIRCLE, SUITE 200, COLUMBIA, MARYLAND 21044
410.992.0712 FAX 410.715.2310
www.centerforhealthyhousing.org

Training Center Courses

- **Half-day Healthy Homes Awareness for Policymakers** course for housing and health policy makers to help them understand the basics of healthy housing and how they can improve program services.
- **Two-day Essentials for Healthy Homes Practitioner** course for field staff who visit homes to inspect housing and/or assist residents with health or housing concerns.
- **Two-day Building Healthy Homes** course offered through the NeighborWorks Training Institute for rehabilitation specialists and those who are writing specifications and managing housing rehabilitation projects. See www.nw.org/training.

Other Partners in the National Healthy Homes Training Center & Network

- Boston University
- Johns Hopkins University
- East Central University, Oklahoma
- Alliance for Healthy Homes
- Association of Environmental Health Academic Programs
- The Coalition to End Childhood Lead Poisoning
- University of Cincinnati
- University of Washington