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CDC Lead Exposure and Prevention Advisory Committee
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Federal Action Plan To Reduce Childhood Lead Exposures and Associated Health Impacts

- Product of President's Task Force on Environmental Health Risks and Safety Risks to Children
 - EPA and HHS are the Task Force co-chairs
 - CDC, EPA, HUD co-chair the Lead Subcommittee
- The Action Plan is a blueprint for reducing lead exposure through collaboration among federal agencies and with stakeholders (e.g., states, tribes, local communities, businesses, nonprofits, healthcare providers, educators, property owners/managers, parents, etc.)

President's Task Force on Environmental Health Risks and Safety Risks to Children

The Children's Environmental Health Task Force (its informal name*) has a record of major lead activities, e.g.:

- 2000: Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards
 - https://www.cdc.gov/nceh/lead/about/fedstrategy2000.pdf
- Z016: Key Federal Programs to Reduce Childhood Lead Exposures and Eliminate Associated Health Impacts
 - https://ptfceh.niehs.nih.gov/features/assets/files/key_federal_programs_to_reduce_childhood_lead_exposures_and_eliminate_associated_health_impactspr esidents_508.pdf
- Z018: Federal Lead Action Plan to Reduce Childhood Lead
 Exposures and Associated Health Impacts
 - https://www.epa.gov/lead/federal-action-plan-reduce-childhood-lead-exposure
- Fewer than half the number of words!

Goals of the Federal Action Plan To Reduce Childhood Lead Exposures and Associated Health Impacts

- The Action Plan details federal objectives and actions under four goals:
 - 1. Reduce children's exposure to lead sources.
 - 2. Identify lead-exposed children and improve their health outcomes.
 - 3. Communicate more effectively with stakeholders.
 - 4. Support and conduct critical research to inform efforts to reduce lead exposures and related health risks.

"Motherhood and Apple Pie" Goals and Objectives

- The goals seem obviously appropriate, and similarly for the objectives under them, but there are many "obviously appropriate" ones, as in the case of apple pie, for example, these dozen:
- Apple Blackberry Pie, Apple Crostata, Apple Crumble Pie, Apple Custard Pie with Cinnamon Streusel, Apple Pie Cake, Apple Pie with Salted Pecan Crumble, Apple Slab Pie with Maple Icing, Apple-Cheddar Crumble Pie, Brown Sugar Apple Walnut Pie, Caramel Apple Streusel Pie, Cinnamon Roll Apple Pie, Crumb-Topped Apple Slab Pie (and over 50 more, at

www.countryliving.com/food-drinks/g973/best-apple-pie-recipe/)

Reaching Consensus on Goals and Objectives

- Reaching consensus across the 17 Task Force agencies' different statutory missions and mandates, funding patterns, organizational cultures, and staff expertise required considerable collaboration.
- The four-year project began in 2015 with developing the inventory, Key Federal Programs to Reduce Childhood Lead Exposures and Eliminate Associated Health Impacts, published in 2016.
 - https://ptfceh.niehs.nih.gov/features/assets/files/key_federal_programs_to_reduce_childhood_lead_exposures_and_eliminate_associated_health_imp actspresidents_508.pdf

Overview of the Action Plan

- The Action Plan is a "roadmap" for describing federal-wide actions to collectively reduce childhood lead exposure and improve children's health.
- It is NOT a budget document, but it is expected to inform future federal budget and regulatory development processes.
- It is being used to enhance collaborative federal efforts, and track progress toward improving children's environmental health.
- It is focused on highly exposed communities and places.

Overview of the Action Plan (continued)

- Its key primary prevention priority is to reduce children's exposure to legacy sources, including deteriorated paint in housing, lead service lines that are contaminating drinking water, and contaminated soil.
- Its key secondary prevention priority is to identify children who have been exposed and improve their health outcomes.
- The Action Plan describes only federal activities, but many of them are informed by, or encourage partnerships with, non-federal stakeholders.

Status Reports for Federal Actions Supporting the Federal Lead Action Plan

- The Federal Lead Action Plan is posted on the Task Force website, https://ptfceh.niehs.nih.gov
 - Interagency progress report to be posted in October 2021, during National Lead Poisoning Prevention Week.
- Also, some agencies have posted interim reports:
 - April 2019 EPA released its first status report via www.epa.gov/lead; and has continued updating it
 - October 2019 First HUD report released via www.hud.gov/lead

Federal Actions Supporting the Federal Lead Action Plan

- This presentation will provide:
 - An overview of the Plan's goals, objectives, and actions
 - Sample CPSC, EPA, HHS, HUD, DOJ, DOL and DOT actions, to prompt suggestions for participation and enhancement



FEDERAL ACTION PLAN

To Reduce Childhood Lead Exposures and Associated Health Impacts

PRESIDENT'S TASK FORCE ON ENVIRONMENTAL Health risks and safety risks to children

DECEMBER 201

Goal 1:

Reduce Children's Exposure to Lead Sources

Examples of Key Federal Actions – Obective 1.1: Reduce Children's Exposure in Homes and Child-Occupied Facilities with Lead-Based Paint Hazards (part 1)

- EPA: Lowered dust-lead hazard standards for floors and windowsills in pre-1978 housing and child-occupied facilities (7/9/2019)
- EPA: Lowered post-abatement dust lead clearance levels in pre-1978 housing and child-occupied facilities (1/7/2021)

Examples of Key Federal Actions – Objective 1.1: Reduce Children's Exposure in Homes and Child-Occupied Facilities with Lead-Based Paint Hazards (part 2)

- HUD: Incorporated CDC environmental intervention blood lead level into Lead Safe Housing Rule (1/17/2017)
- HUD: Expanded prioritization of Lead Hazard Reduction grants to highest-exposure risk homes, neighborhoods, and communities, starting in 2019
- HUD: Awarded \$430 M for 121 Lead Hazard Reduction grants to states and local governments in 2019 and 2020

Examples of Key Federal Actions – Objective 1.1: Reduce Children's Exposure in Homes and Child-Occupied Facilities with Lead-Based Paint Hazards (part 3)

- EPA: Targeting outreach campaigns to home renovation contractors to increase the number (or percentage) of certified renovation, repair and painting (RRP) firms
- HUD, CDC: Provided technical info. for EPA dust-lead hazard standards, and dust lead clearance levels rules
- HUD: Trained more than 1,000 on Lead Safe Housing Rule and its EBL amendment in 20 cities, and by webinars (2019-21)

Examples of Key Federal Actions – Objective 1.2: Reduce Exposure to Lead from Drinking Water (part 1)

- EPA: Revising Lead and Copper Rule re best available peer reviewed science, and enhancing its implementation (1/15/2021; under review per EO 13990)
- EPA: Implementing Water Infrastructure Improvements for the Nation (WIIN) Act grants to small and disadvantaged communities for infrastructure, lead reduction projects, and drinking water testing in schools and childcare centers

Examples of Key Federal Actions – Objective 1.2: Reduce Exposure to Lead from Drinking Water (part 2)

- HUD: Encouraging Community Development Block Grant recipients to use those funds for lead service line replacement in low-to-moderate income neighborhoods.
- HUD and EPA: Harmonizing meaning of drinking water quality terms in HUD regulations.
- EPA: Made available \$6 billion in loans to states that could finance over \$12 billion in water infrastructure projects.

Examples of Key Federal Actions – Objective 1.3: Reduce Exposure to Lead in Soil

- HUD: Includes soil-lead hazard evaluation and control in Lead Hazard Control grants and Lead Safe Housing Rule
- EPA/OLEM, HHS/ATSDR: Evaluating and managing lead contamination at Superfund, RCRA corrective action sites
- HUD and EPA: Collaborating on lead exposures at HUD-assisted housing on or near Superfund sites
- ATSDR: Expanding use of Soil Screening, Health,
 Outreach, and Partnership (SoilSHOP) health ed events

Examples of Key Federal Actions – Objective 1.4: Reduce Exposure to Lead Associated with Emissions to Ambient Air

- EPA: Reducing number of areas violating the lead National Ambient Air Quality Standard for lead by over half, by working with state and tribal air agencies
- EPA: Updating the science information base (Integrated Science Assessment) for the review of the lead NAAQS.
- EPA and DOT/FAA: Evaluating impacts of lead emissions from aircraft using leaded aviation fuel

Examples of Key Federal Actions – Objective 1.5: Reduce Lead Exposure from Occupational Sources (part 1)

- OSHA: Issued Fall 2020 Semiannual Regulatory Agenda item on pre-rule work on possible revision of lead standards re blood lead level for medical removal
- NIOSH: Convened interagency Occupational Take-home Lead Workgroup developing guidance for multiple stakeholder groups on identifying operational causes of take-home lead, preventing it, and addressing it when it does occur

Examples of Key Federal Actions – Objective 1.5: Reduce Lead Exposure from Occupational Sources (part 2)

HUD: Collaborating with HHS/NIEHS Worker Training Program on increasing lead awareness by HUD-funded communities with Superfund sites of the program's providing OSH training to workers handling hazmats

Examples of Key Federal Actions – Objective 1.6: Reduce Exposure to Lead in Food

- FDA: Reevaluating provisional tolerable total dietary lead intake level
- FDA: Considering increased monitoring of domestic and imported foods for lead
- FDA: Considering whether to establish maximum lead levels in foods by regulation or by guidance
- FDA: Participating in decreasing the Codex Alimentarius General Standard maximum levels for lead in food

Examples of Key Federal Actions – Objective 1.7: Reduce Exposure to Lead in Cosmetics and Personal Care Products

- FDA: Continuing monitoring domestic and imported cosmetics for lead impurities
- FDA: Participating in international lead reduction efforts
- FDA: Monitoring, posting results of lead levels in cosmetic products
- FDA: Posted draft, and considering final, guidance for a maximum lead level in cosmetic products

Examples of Key Federal Actions – Objective 1.8: Reduce Children's Exposure to Lead Sources in Consumer Products

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- CPSC: Continuing to enforce regulations regarding lead content and lead paint limits for consumer products
- CPSC: Continuing to enforce labeling requirements to prevent consumer product-related lead exposure
- CPSC: Working internationally to improve foreign suppliers' compliance with U.S. lead-based paint and total lead content requirements

Examples of Key Federal Actions – Objective 1.9: Reduce Lead Exposure Through Enforcement and Compliance Assistance

- HUD, EPA: Enforcement of Lead Disclosure Rule (rent or buy pre-1978 housing) (greater than 200 K units so far made lead safe per settlement agreements, plus greater than \$1 million in fines)
- HUD, EPA, DOJ: Conduct administrative enforcement of Lead Safe Housing Rule (assisted pre-1978 housing)
- HUD, EPA: Provide compliance assistance for homes and communities with lead-based paint, lead-contaminated drinking water, and lead-contaminated soil problems

Goal 2:

Identify Lead-Exposed Children and Improve Their Health Outcomes

Examples of Key Federal Actions – Objective 2.1: Improve Surveillance of Blood Lead Levels (BLLs) to Identify Children Exposed to Lead Actions (part 1)

- HHS/CDC/NCEH: Evaluating update to children's blood lead reference value
- HUD: Evaluating grant programs with state, tribal, and local partners to identify best practices and gaps in services to address in new funding opportunities
- CDC: Refining health objectives (e.g., Healthy People 2030 (8/2020) re national BLL target) to focus on highest risk populations

Examples of Key Federal Actions – Objective 2.1: Improve Surveillance of Blood Lead Levels (BLLs) to Identify Children Exposed to Lead Actions (part 2)

- CMS, CDC, USDA: Exploring improving utility of required blood testing in Medicaid and the Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- CDC: Conducting targeted screening surveys and/or small-area prevalence studies to identify localities with high lead exposure risk
- HHS/IHS, CDC; EPA, HUD, USDA: Better understanding of childhood lead exposures through collaboration with tribal partners; improve federal programs.

Examples of Key Federal Actions – Objective 2.2: Facilitate Follow-up Blood Lead Testing and Monitoring of Children Identified as Lead-

Exposed (part 1)

- ATSDR, EPA/OCHP: Support Pediatric Env. H. Specialty Units in increasing number of obstetricians, pediatricians, nurses, and with continuing education on prevention, diagnosis, management and treatment of lead exposure
- CDC, CMS, HUD: Enhancing ways to work with state, tribal and local communities to match children identified as lead-exposed with local environmental assessment services and enhanced health services

Examples of Key Federal Actions – Objective 2.2: Facilitate Follow-up Blood Lead Testing and Monitoring of Children Identified as Lead-Exposed (part 2)

- HUD: Conducting collaborative outreach and education by lead hazard control grantees to identify lead-exposed children and refer them for evaluation
- HUD: Using Mayor's Challenges (through National League of Cities), Community Build Events, etc., to identify leadexposed children and refer them for medical evaluation

Examples of Key Federal Actions – Objective 2.3: Facilitate Screening for Developmental Delays in Children Identified as Lead-Exposed

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- CDC, NIH Shriver Institute: Working where surveillance has identified children with higher BLLs.
- ■CDC, NIH Shriver Institute: Encouraging primary care and other providers to promote developmental monitoring by giving CDC's "Learn the Signs. Act Early." developmental tracker tools to parents and other caregivers when a child less than 5 years has documented lead exposure; enhance online visibility of the Learn the Signs website materials.

Examples of Key Federal Actions – Objective 2.4: Facilitate Referrals and Receipt of Appropriate Services for Children Identified as At-Risk for Developmental Delays Due to Lead Exposure

- EPA, ATSDR: Provide PEHSUs and public health agencies with resources on effective treatments for disorders and for developmental monitoring related to lead exposures
- HUD: Use lead hazard control grantees to be local subject matter experts for state-coordinated care leadership,
 PEHSUs, and local health care providers

Goal 3:

Communicate More Effectively with Stakeholders

Examples of Key Federal Actions, Objective 3.1: Consolidate and Streamline Federal Lead-Related Communication and Messaging (part 1)

- CEHTF: Enhancing online portal to consolidate and streamline federal-wide public lead communication, with links to agency-specific information
- CEHTF: Enhancing local partnerships with community organizations, local health agencies, faith-based organizations and private philanthropies on lead-based paint hazards, and to promote data sharing

Examples of Key Federal Actions – Objective 3.1: Consolidate and Streamline Federal Lead-Related Communication and Messaging (part 2)

- CDC, EPA, HUD, USDA: Partnering on outreach campaigns with heavy lead emphasis:
 - Natl. Healthy Homes Month (June): webinars, toolkits
 - Natl. Lead Pois. Prev. Week (last full week of October)
 - Interagency online NLPPW Toolkit: Outreach materials to help stakeholders conduct their activities
 - At least four webinars on lead safety issues

Examples of Key Federal Actions – Objective 3.2: Improve Awareness of Lead Hazards, Prevention, and Remediation among Diverse Populations, Especially Those Most at Risk (part 1)

- CEHTF: Using NIEHS/EPA Children's Centers, PEHSUs developing appropriate, evidence-based lead exposure prevention and intervention communication materials; disseminating through community partnerships.
- EPA, HUD: National Lead Information Clearinghouse (800-424-LEAD [TTY: 711]), operated by EPA

Examples of Key Federal Actions – Objective 3.2: Improve Awareness of Lead Hazards, Prevention, and Remediation among Diverse Populations, Especially Those Most at Risk (part 2)

- EPA: Conducted compliance assistance and outreach activities that supported abatement, risk assessment and inspection components of the Lead-Based Paint Program
- EPA: Conducted related activities that supported the Renovation, Repair, and Painting Program, including to increase the number of RRP-certified firms

Examples of Key Federal Actions – Objective 3.2: Improve Awareness of Lead Hazards, Prevention, and Remediation among Diverse Populations, Especially Those Most at Risk (part 3)

- EPA: Held webinars targeting areas of the Lead and Copper Rule that pose common implementation challenges to states and water systems.
 - HUD: Develop disaster recovery curriculum for National Preparedness Month (Sept.) on lead and healthy homes
 - HUD: Revised w/CDC, EPA, graphic Lead Paint Safety Field Guide, on lead-safe maintenance work practices

Goal 4:

Support and conduct critical research to inform efforts to reduce lead exposures and related health risks

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 1)

- CEHTF: Enhance and apply data and tools (e.g., models or approaches) and determine the key drivers of blood lead levels from multimedia exposures to inform lead regulatory decisions and site assessments, e.g.:
 - EPA building on its children's lead exposure multimedia modeling analysis for guiding public health decision-making
 - HUD funding exposure pathway analyses on lead risk data collected by MI DOH (Pb_{W.D.S}, BLLs, etc.)

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 2)

- CEHTF: Generate data, maps and mapping tools to identify high exposure communities or locations and disparities for prioritization efforts to reduce children's blood lead levels, e.g.,
 - CDC, EPA, HUD: Developing and applying lead mapping and data analysis approaches and tools for their different missions, purposes, and questions

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 3)

- CEHTF: Generate data to address critical gaps for reducing uncertainty in lead modeling and mapping for exposure/risk analyses and for estimating populationwide health benefits of actions to reduce lead exposures
 - CEHTF: Identify approaches to prevent, mitigate and communicate about lead exposures and risks in exposed communities

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 4)

CEHTF: Evaluate the effectiveness of actions (e.g., interventions, programs, policies, enforcement) to prevent lead exposure, mitigate health effects and communicate on lead exposures/risks

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 5)

- HHS (CDC, NIEHS), EPA (ORD), HUD (OLHCHH):
 - Conducted multi-agency lead research workshop to initiate a plan to address highest priority research
 - Convened working group to continue cross federal agency research coordination
- HUD: Awards Lead Technical Studies grants to research agencies, firms, organizations annually, also awards lead research contracts

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 6) – 2020 HUD LTS grants

- Evaluate long-term efficacy of residential lead remediation and its impact on children's cognitive levels
- Correlate ceramic tile lead levels and dust lead levels
- Target homes with high lead exposure risks by leveraging big data and advanced machine learning algorithms
- Evaluate community (household) lead risk screening of homes to prompt environmental lead reduction

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 7) – 2020 HUD LTS grants

- Assess cost-effectiveness of protecting children via temporary emergency relocations, and permanent voluntary relocations where lead hazard control delayed
- Assess long-term outcomes of lead hazard control work on health of children in residence at that time and those who began to reside there afterward
- Develop housing-based lead risk index to cost effectively target homes with high interior lead dust levels

Examples of Key Federal Actions – Objective 4.1: Prioritize and Address the Critical Research and Data Needs to Inform Lead Policies and Guide Decisions (part 8)

- HUD: Conducted American Healthy Homes Survey II to determine progress in reducing the prevalence of US homes with LBP hazards, elevated Pb_W levels, lead service lines; demographic and economic associations
 - EPA: Analyzing AHHS II water samples for lead
 - AHHS II also covers mold and moisture damage, unintentional injury potential, and, collaborating w/EPA, pesticide residues, particularly of persistent pesticides

Examples of Key Federal Actions – Objective 4.2: Establish the Lead Exposure and Prevention Advisory Committee

■ CDC: Water Infrastructure Improvements for the Nation (WIIN) Act had CDC/ATSDR set up LEPAC with health and education professionals, at least half federal, to review research and federal programs and services, and identify effective services and best practices for addressing and preventing lead exposure and its impacts in communities; has met 4/29/2020, 10/30/2020, 5/14/2021

References

- Task Force website: https://ptfceh.niehs.nih.gov/
- Lead Subcommittee co-chair agencies' lead websites:
 - CDC: www.cdc.gov/lead EPA: www.epa.gov/lead
 - HUD: www.hud.gov/lead
- National Lead Information Clearinghouse: 800-424-LEAD
- HUD Lead Regulations hotline: 202-402-7698
 - Lead.Regulations@HUD.gov
- TTY/TDD for phone numbers: 711

