Hybrid Meetings: Attend King County Board of Health meetings in person in Council Chambers (Room 1001), 516 3rd Avenue in Seattle, or through remote access. Details on how to attend and/or provide comment remotely are listed below.
There are two ways to provide public comment:

1. In person: You may attend the meeting in person in Council Chambers.

2. Remote attendance on the Zoom Webinar: You may provide oral public comment at the meeting by connecting to the meeting via phone or computer using the ZOOM application at https://zoom.us/, and entering the Webinar ID below.
   Join online
   Paste the following link into the address bar of your web browser: https://kingcounty.zoom.us/j/83626142088 to join online.

   Join by Telephone
   Dial: US : +1 253 215 8782
   Webinar ID: 836 2614 2088

   If you do not wish to provide public comment, please help us manage the callers by using one of the options below to watch or listen to the meeting.

   HOW TO WATCH/LISTEN TO THE MEETING: There are two ways to watch or listen in to the meeting:
   1) Stream online via this link https://livestream.com/accounts/15175343/events/4485487 or input the link web address into your web browser.
   2) Watch King County TV Channel 22 (Comcast Channel 22 and 322(HD), Wave Broadband Channel 2.

1. Call to Order
2. Roll Call
3. Announcement of Any Alternates Serving in Place of Regular Members
4. Approval of Minutes of May 19, 2022  pg 4
5. Public Comments
6. Chair’s Report
7. Director’s Report
Briefings

8. BOH Briefing No. 22-B06  pg 10
   Preventing Childhood Lead Poisoning in King County
   Amy Shumann, Manager, Lead and Toxics Program, Environmental Health Services Division, Public Health - Seattle and King County
   Monica Ayers, Policy Liaison, Hazardous Waste Management Program
   MaryKate Cardon, DNP, BSN, RN, Co-Director, NW Pediatric Environmental Health Specialty Unit, University of Washington
   Steve Whittaker, PhD; Research Services Program Manager, Hazardous Waste Management Program
   Katie M. Fellows, PhD; Project Manager, Hazardous Waste Management Program

9. BOH Briefing No. 22-B07
   COVID-19 and “Long COVID”
   Dr. Jeffrey S. Duchin, Health Officer and Chief, Communicable Disease Epidemiology & Immunization Section, Public Health - Seattle and King County

Discussion and Possible Action

10. Board of Health restructure recruitment planning update

   Joy Carpine-Cazzanti, Board Administrator, Public Health- Seattle and King County

11. Board Member Updates

12. Administrator’s Report

13. Other Business

Adjournment

If you have questions or need additional information about this agenda, please call 206-263-0365, or write to Joy Carpine Cazzanti, Board of Health Administrator via email at KCBOHAdmin@kingcounty.gov
PUBLIC NOTICE: To help prevent the spread of the COVID 19 virus, all Boardmembers and staff will be participating in the Board of Health Meeting remotely. The live feed of the meeting will be streaming on the Council's website and on KCTV channel 22.
HOW TO PROVIDE PUBLIC COMMENT:

Join online
Paste the following link into the address bar of your web browser:
https://kingcounty.zoom.us/j/83626142088 to join online.

Join by Telephone
Dial: US : +1 253 215 8782
Meeting ID: 836 2614 2088

If you do not wish to provide public comment, please help us manage the callers by using one of the options below to watch or listen to the meeting.

HOW TO WATCH/LISTEN TO THE MEETING: There are two ways to watch or listen in to the meeting:

1) Stream online via this link
https://livestream.com/accounts/15175343/events/4485487 or input the link web address into your web browser.

2) Watch King County TV Channel 22 (Comcast Channel 22 and 322(HD), Wave Broadband Channel 2.

1. Call to Order

   The meeting was called to order at 1:03 p.m.

   Boardmember McDermott recessed the meeting at 1:59 p.m., for approximately 2 minutes, until 2:01 p.m.

   Boardmember McDermott reconvened the meeting at 2:01 p.m.

2. Roll Call

   Present: 11 - Baker, Daniell, de Castro, Herbold, Honda, Kohl-Welles, McDermott, Morales, Mosqueda, Zahilay and Koellen

3. Announcement of Any Alternates Serving in Place of Regular Members

   Boardmember Koellen served in place of Boardmember Honda.

   Boardmember Narruhn was also in attendance.
4. **Approval of Minutes of April 21, 2022**

   Boardmember Morales moved to approve the minutes of the April 21, 2022, meeting as presented. Seeing no objection, the Chair so ordered.

5. **Public Comments**

   The following people spoke:
   - Lily Wilson Codega
   - Evan Woods
   - Dylan Gustetich

6. **Chair's Report**

   Boardmember McDermott welcomed Joy Carpine-Cazzanti, Board of Health Administrator; and briefed the Board on upcoming changes to the state Open Public Meetings Act and the structure of the Board.

7. **Director's Report**

   Dennis Worsham, Interim Director, Public Health - Seattle & King County, briefed the Board on congenital syphilis, the COVID-19 response and the current shortage of baby formula in King County.

8. **Appointment of Health Professional**

   Boardmember Morales made a motion to appoint Dr. Robin Narruhn as a Health Professional. The motion carried.

   Boardmember Narruhn made remarks and thanked the Board.
9. R&R No. BOH22-01

A RULE AND REGULATION relating to retail food establishments and making technical amendments; amending R&R 05-06, Section 4, as amended, and BOH 5.04.020, R&R 15-04, Section 3, as amended, and BOH 5.04.025, R&R 17-01, Section 2, and BOH 5.04.045, R&R 17-01 Section 3, and BOH 5.04.055, R&R 05-06, Section 8, as amended, and BOH 5.04.290, R&R 91, Section 1 (part), as amended, and BOH 5.04.370, R&R 91, Section 1 (part), as amended, and BOH 5.04.390, R&R 05-06, Section 12, as amended, and BOH 5.04.410, R&R 05-06, Section 15, as amended, and BOH 5.04.460, R&R 91, Section 1 (part), as amended, and BOH 5.04.620, R&R 09-05, Section 10, as amended, and BOH 5.04.625, R&R 91, Section 1 (part), as amended, and BOH 5.04.640 and R&R 05-06, Section 23, as amended, and BOH 5.34.030 and repealing R&R 05-06, Section 14, as amended, and BOH 5.04.450, R&R 13-01, Section 18, and BOH 5.34.005, HDR 20, Section 1 (part), and BOH R6.04.010, HDR 20, Section 1 (part), and BOH R6.04.020, HDR 20, Section 1 (part), and BOH R6.04.030, HDR 20, Section 1 (part), and BOH R6.04.040, HDR 20, Section 1 (part), and BOH R6.04.050, HDR 20, Section 1 (part), and BOH R6.04.060, HDR 20, Section 1 (part), and BOH R6.04.070, HDR 29, Section 1, and BOH R6.26.010, HDR 29, Section 2(A, B, C), and BOH R6.26.020, HDR 29, Section 2(D), and BOH R6.26.030, HDR 29, Section 2(E), and BOH R6.26.040, HDR 29, Section 2(F), and BOH R6.26.050 and HDR 29, Section 2(G, H), and BOH R6.26.060; enacted pursuant to RCW 70.05.060, including the latest amendments or revisions thereto.

Eyob Mazengia, Health & Environmental Investigator IV, DPH/EHD - Food & Facilities Environmental Health Services, briefed the Board and answered questions.

Boardmember Morales moved Amendment 1.

Roman Welyzcko, Project Program Manager IV, DPH/EHD - Environmental Health General Administration, briefed the Board and answered questions.

Voting on Amendment 1, the motion carried.

Boardmember Morales moved Title Amendment T1. The motion carried.

A motion was made by Boardmember Morales that this R&R be Passed as Amended. The motion carried by the following vote:


Excused: 1 - Honda
10. **R&R No. BOH22-02**

A RULE AND REGULATION relating to the membership of the King County board of health and hybrid meetings; and amending R&R 1, Amendment Section 2, as amended, and BOH 2.04.020, R&R 09-04, Section 2, as amended, and BOH 2.04.035, R&R 09-04, Section 3, and BOH 2.04.045, R&R 09-04, Section 5, as amended, and BOH 2.04.065 and R&R 09-04, Section 8, as amended, and BOH 2.04.165.

Sam Porter, Council Staff, briefed the Board and answered questions.

Boardmember Baker moved Amendment 1. The motion carried.

Boardmember Baker moved Amendment 2. The motion carried.

Boardmember Kohl-Welles moved Amendment 3. The motion carried.

Boardmember Baker moved Title Amendment T2. The motion carried.

A motion was made by Boardmember Ziahlay that this R&R be Passed as Amended. The motion carried by the following vote:

Yes: 13 - Baker, Daniell, de Castro, Herbold, Kohl-Welles, McDermott, Morales, Mosqueda, Ziahlay and Koellen

Excused: 1 - Honda

**Discussion**

11. **Board of Health restructure recruitment planning update.**

Joy Carpine-Cazzanti, Board of Health Administrator, briefed the Board and answered questions.

12. **Board Member Updates**

No updates were given.

13. **Administrator’s Report**

Joy Carpine-Cazzanti provided an update on recruitment planning and discussed next steps for establishing a subcommittee to guide the effort.
14. **Other Business**

   *No other business was presented.*

**Adjournment**

   *The meeting was adjourned at 2:34 p.m.*

If you have questions or need additional information about this agenda, please call (206) 263-0365, or write to Joy Carpine-Cazzanti, Board of Health Administrator via email at KCBOHAdmin@kingcounty.gov.

Approved this _____________ day of ________________

______________________________
Clerk’s Signature
Subject
Preventing childhood lead poisoning in King County

Summary
Lead continues to permeate children’s environments and be a significant threat to health and well-being despite more than 100 years of evidence that lead is neurotoxic and causes irreparable harm. Lead paint is understood to be the greatest source of exposure in the United States but the situation in King County is evolving, with consumer products, including aluminum cookware, cosmetics, and spices, making up an increasing portion of lead poisoning sources based on case investigations. Other sources of environmental lead exposure in King County include fuel used by small airplanes at general aviation airports, and industrial sites in south King County and South Seattle. Lead-based paint was banned nationally in 1978 but remains an ongoing issue in King County with more than 46.3% of children under age 6 living in homes built before 1978.

There is no safe blood level of lead. Even low levels of blood lead <5 micrograms/deciliter can impair a child’s ability to learn and can increase aggressive behavior. There is well-documented research on the association between childhood lead exposure and later risk of poor educational attainment and justice system involvement. Many children exposed to lead are asymptomatic and long-term effects of lead exposure are only known years later.

King County ranks near the bottom nationally for blood lead testing of children. Medicaid requires that all Washington children on Apple Health are tested for lead at 12 and 24 months but there is no enforcement of this requirement. As a result, only about 18% of Medicaid eligible children in King County are tested, limiting our ability to understand the extent of lead poisoning in King County children. Regular blood lead testing is critical for identifying children with elevated levels early enough that intervention can prevent or mitigate long-term developmental damage and for identifying and addressing current and emerging sources of lead exposure in children’s environments.

Background
The Board of Health was last briefed on childhood lead poisoning prevention in 2016. At that time, the Board passed RESOLUTION 16-07 calling for meaningful actions to address lead poisoning and support for efforts to eliminate lead poisoning in King County. Specifically, the resolution noted that:

A. The Board of Health calls on federal and state lawmakers to take meaningful action to address lead poisoning;

B. The Board of Health encourages all King County healthcare providers to adopt Washington state Department of Health guidance for lead screening of children at ages twelve and twenty-four months, including screening all Medicaid-eligible children, and screening based on the recommended child lead exposure risk assessment; and

C. The Board of Health supports updating the occupational lead standards for lead in Washington state to provide greater protection for workers and their families.

Since Resolution 16-07 was passed, the following progress has been made:

- The Washington State Department of Labor and Industries updated the occupational standards for lead exposure (2019).
- Blood Lead Screening levels increased in King County until 2020. Unfortunately, COVID-19 has decreased the number of children receiving routine well-child visits, impacting both lead testing rates and vaccination rates.
- The State Board of Health adopted revisions to WAC 246-366, Primary and Secondary Schools that includes a section requiring lead testing. However, the new provisions can't be implemented until funding is included in the legislative budget. Until funding is available, the previous rule version remains in effect and does NOT include lead testing.
- In April 2021, the State Legislature passed E2SHB 1139, requiring testing for lead in school drinking water and remediation when elevated levels are found.
- The bipartisan infrastructure bill that Congress approved November 2021 calls for allocating $15 billion for lead pipe remediation.
- In 2016, Governor Inslee issued a directive that called on the Department of Health (DOH) to work with the Healthcare Authority to improve lead screening rates of children on Medicaid, who are at highest risk. It also called for providing case management services to children with elevated blood lead levels and their families.
- DOH was asked to develop a plan to remove all lead service lines and lead components in larger public drinking water systems over 15 years.
- DOH agreed to seek federal assistance to revise the federal lead and copper rule, removing lead from drinking water systems.
- The Department of Early Learning, in collaboration with DOH and the Office of Financial Management, were directed to assess whether care providers located in buildings constructed in whole or in part prior to 1978 should have an evaluation for sources of lead exposure, including the testing of drinking water.
- Gov. Jay Inslee directed state agencies to determine feasibility of a Lead Rental
Inspection and Registry Program for pre-1978 housing, though the status of this is unclear.

**Childhood Lead Poisoning in King County – Current Conditions**

Childhood lead poisoning remains a major pediatric environmental health issue across the nation. The severe impacts of lead on the growth and development of children prompted the federal government to require surveillance of lead poisoning, the only non-communicable disease with this requirement.

King County is committed to improving all residents’ foundation for reaching their full and individual potential and recognizes the importance of investing in the County’s youngest residents. This foundation stresses the importance of investing early to increase access to (among other resources) prenatal care, housing, food, and then moving to sustain these gains. Lead poisoning can derail the intended outcomes of these efforts.

Data describing childhood lead exposure in Washington state is limited, and a more rigorous health surveillance effort would help better define the extent of the problem. At the present time, the age of the house a person lives in is the most established risk factor for lead poisoning. Washington ranks 17th in the nation in number of households built prior to 1950 (and therefore likely to contain lead-based paint) and ranks 17th in number of pre-1978 households. Despite these risk factors, Washington state and King County rank near the bottom nationally for blood lead testing of young children.

Under Washington state law, clinical laboratories must report blood lead results to the Department of Health Childhood Lead Poisoning Prevention Program. Blood lead data for children (under age 15) who are residents of King County are forwarded to Public Health – Seattle and King County. Data for adults are forwarded to the Adult Blood Lead Epidemiology and Surveillance (ABLES) program, located in the Washington State Department of Labor & Industries (L&I). Staff from Public Health and L&I initiate lead intervention efforts for lead-exposed children and adults, respectively.

**Table 1. Blood Lead (BL) testing rates before age 2 and 5 years in King County, WA**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent Tested &lt;2 years old</th>
<th>Percent tested &lt;5 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>7.1%</td>
<td>12.9%</td>
</tr>
<tr>
<td>2018</td>
<td>6.6%</td>
<td>13.9%</td>
</tr>
<tr>
<td>2019</td>
<td>7.1%</td>
<td>15.3%</td>
</tr>
<tr>
<td>2020</td>
<td>6.9%</td>
<td>15.7%</td>
</tr>
<tr>
<td>2021</td>
<td>5.7%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

Washington State WDRS for children aged 1-5 years at the end of 2021
Public Health provides case management services to all children residing in King County with a Blood Lead Level (BLL) above 5 µg/dl (Figure 1). Cases are received from Washington State Department of Health (DOH) via the Washington Disease Registry System (WDRS). Case management support includes providing education to families, recommending appropriate risk reduction measures, making appropriate referrals for additional services, and monitoring follow-up medical care. Support for families continues until blood lead levels are <5.0 µg/dl. Improving blood lead testing rates will likely increase the number of children who need case management services.
Refugee Children are at Particular Risk

Several studies have demonstrated that lead poisoning disproportionately impacts refugee children resettled in the United States and they are susceptible to further exposures in the U.S. due to substandard housing. Consequently, the CDC recommends that all refugee infants, children, adolescents, and pregnant and lactating women and girls arriving in the U.S. undergo an initial lead exposure screening with a blood lead test.

The DOH Refugee and Immigrant Health Program reported that for Federal Fiscal Year 2016-2020, children from Afghanistan (0-16 years of age) who resettled in Washington State (BLL data available for 1,669 Afghan children) had the highest prevalence of BLLs of 5-9 μg/dL (34%) and ≥10 μg/dL (10%) of all resettled children.

Recognizing the high prevalence of elevated BLLs in newly resettled Afghan refugee children, the Hazardous Waste Management Program and partners from PHSKC conducted a focused intervention between July 2018 and February 2020 (the “Public Health Partnership”). This intervention included in-home environmental assessments at the primary residences of Afghan children with BLLs ≥5μg/dL.

The environmental assessment included screening items for lead content, which revealed the presence of several lead-containing items in the homes, including glazed dishes, silverware, spices, jewelry, and personal care products (e.g., surma and kajal). Investigators found that aluminum cookpots brought by the families from Afghanistan (including traditional Afghan
pressure cookers and cookware pots) frequently contained lead levels in the hundreds of parts per million (ppm) and occasionally in the thousands of ppm.

Researchers from the Hazardous Waste Management Program worked with the Afghan community to identify cookware that could be purchased locally that would be a suitable and safer replacement. To assure that replacement cookware was safe, the research team screened 40 aluminum cookpots and pressure cookers for lead content and measured how much would be released under simulated cooking and food storage conditions. This study revealed that all cookpots provided by the Afghan community released enough lead to exceed recommended daily limits for childhood lead intake. Also of concern is that many aluminum cookpots available for purchase in King County posed a risk of lead poisoning – for both children and adults. Consequently, lead-contaminated aluminum cookware poses a risk for all U.S. residents – not only refugees. However, screening of stainless steel cookware revealed lead concentrations below levels of concern. These findings were published in the May 2022 issue of the Journal of Exposure science and Environmental Epidemiology (JESEE).

**Donated aluminum cookpot from Afghanistan. Avg lead conc. 5,000 ppm (0 – 33,000 ppm).**

**Traditional Afghan pressure cooker purchased from Etsy. Avg. lead conc. 8,000 ppm (0 – 66,000 ppm).**

**Lead and Racial Equity - The Vulnerability of African American Mothers and Children to Lead Exposure**

The African American community is also at high-risk of lead exposure. Several factors, including hazardous environmental conditions, poor nutrition, and low housing quality puts African Americans at increased risk. Studies conducted across the United States suggest that African American children have the highest prevalence of elevated BLLs of all other U.S.-born children. A report by the CDC\(^\text{vi}\) found that African American children had an average BLL of 5.6 µg/dL - over twice the average blood levels found in white children. During pregnancy, African American mothers had 2.2 times higher lead levels in their second and third trimesters and 1.9 higher lead levels in the child’s first year of life, compared to white mothers. This is significant to the health and wellbeing of the mother and the baby because lead can be passed during pregnancy and breastfeeding.
Blood Lead testing rates and rates of elevated BLL among African American children and pregnant people in King County are not well understood because at the time of Blood Lead testing, Washington Department of Health (DOH) collects race data (Black) and does not collect ethnicity data. In 2023, DOH will require that medical providers and clinical laboratories collect both race and ethnicity data when collecting blood lead samples.

Current Prevention Efforts - Public Health and Hazardous Waste Management Program Partnership

The Environmental Health Services Division at Public Health – Seattle & King County advances environmental justice and reduces racial health inequities by partnering with organizations in south Seattle and south King County with the highest rates of poverty; greatest number of immigrants, refugees, and communities of color; largest concentration of older housing; and highest rates of elevated Blood Lead Levels to increase testing, investigate sources of lead exposure among lead poisoned children, improve linkages to developmental services, and prevent lead exposures. The Lead and Toxics Program receives Best Starts for Kids levy funding, CDC Childhood Lead Poisoning Prevention Program grant funding, EPA grant funding, and WA Dept of Ecology funding.

The Hazardous Waste Management Program is a coalition of local governments providing technical assistance and education outreach to reduce exposures to lead and other toxic materials at home and at work. The Program is funded by local Hazardous Waste fees on solid waste and wastewater services in King County. Since a high number of referrals are for Afghan families, the Program partners with an Afghan Health Initiative Community Health Advocate (CHA) to provide culturally relevant in-language support to assist with the coordination and participation of in-home case management visits for children with eBLLs. Services include lead awareness and risk reduction education and support for alternative solutions, such as exchanging cookware containing lead with a non-lead alternative.

Public Health and the Hazardous Waste Program are prioritizing the following three strategies to address childhood lead poisoning in King County:

Increase Blood Lead Testing:

- The Hazardous Waste and Lead and Toxics Programs provided physicians and nurses with free Continuing Education opportunities focused on the importance of testing for lead, best practices for evaluating lead levels in children, and the importance of effective referrals for developmental services for lead poisoned children (Summer 2021). Community members were included in the planning, creation, and presentation of content.

- The Hazardous Waste and Lead and Toxics Programs work in partnership with community based organizations and healthcare systems to provide lead education and outreach services including Somali Health Board, King County Medical Society, Horn of Africa Services, Mother Africa, Washington Poison Center, Toxic Free Future, Afghan Board of Health June 16, 2022
Health Initiative, Public Health- Refugee Screening Clinic, PolyClinic, Harborview, HealthPoint, and Virginia Mason.

**Prevent Lead Exposures:**

- In 2021, the Lead and Toxics Program partnered with Horn of Africa Services, Somali Health Board, and Toxic-Free Future, to design and implement a lead awareness media campaign that included:
  - A **Lead Comic short, animated video** translated into 8 languages
  - Educational videos featuring community actors that were shared online and on local television networks.
  - Two radio interviews
  - Four radio spots featuring community members in four languages.

- In 2021, the Lead and Toxics Program received a two year EPA grant to build community capacity around indoor air quality and healthy home assessments (including lead exposure).

- In 2018, Public Health – Refugee Screening Clinic and the Hazardous Waste Management Program formed a Public Health Partnership to provide in-language services and education to refugee families with children who have BLLs of >5 μg/dL, including in-home lead assessments, nutritional and developmental screenings, and referrals to community resources to provide a larger circle of care.

- The Hazardous Waste Program provides coordinated case management to families with lead-poisoned children to identify and reduce or eliminate sources of lead in their environments.

- The Lead and Toxics Program implements the Tacoma Smelter Plume “Dirt Alert” program in King County to address legacy lead and arsenic soil contamination.

- Twenty product testing events, June - December 2022, will provide opportunities for communities most at risk for lead exposure to bring items (ceramics, cookware, spices, etc.) to community-hosted events for testing.

**Improve Linkages to Developmental Services:**

- The Lead and Toxics Program, Best Starts for Kids partners, and Harborview Pediatrics changed the diagnosis of elevated Blood Level to an automatically qualified condition for lead poisoned children to receive developmental services from the Early Supports for Infants and Toddlers Program.

Effective surveillance of current and emerging sources of lead and Blood Lead testing for children (and for pregnant people) are more important than ever. Current challenges include very low testing rates and on-going impacts from COVID-19 that have decreased children’s access to preventive healthcare. In addition, there are few resources available for low-income families to safely remediate lead paint in the home and no easy way for them to test products they use for lead. Funding for the Lead and Toxics Program was included in the Best Starts for Kids levy renewal and provides important opportunities to implement activities within the priority strategy areas. Recent media coverage related to lead in aluminum cookware may increase attention from
both state and federal agencies and provide opportunities to improve the safety of consumer products.

References:

i Centers for Disease Control and Prevention. Refugees and Other Newcomer Persons Resettled to the United States. 2022; Available at: https://www.cdc.gov/nceh/lead/prevention/refugees.htm.


vi Prevalence of blood lead levels ≥5 micro g/dL among US children 1 to 5 years of age and socioeconomic and demographic factors associated with blood of lead levels 5 to 10 micro g/dL, Third National Health and Nutrition Examination Survey, 1988-1994 - PubMed (nih.gov)