## Family Health

The main goal of the Family Health Program is to prevent and reduce health risks from exposure to lead and smelter metals in the community, within the broader context of promoting children’s healthy development end engaging the community in the human health issues.

Specific goals are:

* to prevent young children’s and pregnant women’s exposure to lead
* to inform the community, and particularly expectant families and families with young children, about potential health risks from exposure to lead and other smelter metals
* to engage the community, and particularly expectant families and families with young children, in addressing potential health risks
* to help enhance the health and well-being of young children in the Trail area
* to help make the Trail area the best place to raise a family

The Family Health Program includes six different activities:

* Family and Caregiver Education and Engagement
* Healthy Families Home Visits
* Children’s Blood Lead Testing
* Family Case Management
* Community Collaboration to enhance Early Childhood Development
* Community Education and Engagement

The Family Health Program is delivered by Interior Health’s Public Health Nursing services. The Lead Family Health Program Coordinator, a public health nurse, is supported by the South Team Regional Public Health Team Leader, the Kootenay Boundary Community Integration Health Services (CIHS) Manager, Kootenay Boundary CIHS Administrator, and the IH Senior Medical Health Officer as well as IH information technology department and laboratory technicians, and administrative and nursing supports at the Kiro Wellness Centre.

The Family Health Program uses a collaborative, relationship-building approach wherever possible to support and encourage:

* client (family) engagement, empowerment and informed decision-making to promote lead exposure prevention and children’s healthy development
* parent, caregiver and early childhood development service provider participation in the direction and governance of THE Program (ie. participation on the Trail Health & Environment Committee) as well as in planning and continuous quality improvement activities (e.g. designing the website [www.thep.ca](http://www.thep.ca))
* implementation of collaborative education and engagement activities with health, social service and early learning providers
* seamless service provision to expectant families and families with young children by Interior Health Public Health
* the work of Success by 6 and the Family Action Network, multi-sectoral networks aimed at improving early childhood development outcomes in Greater Trail

Internally, THE Program uses a collaborative “Program Team” approach to planning, implementation, monitoring and evaluation of the Family Health and Home & Garden Programs. THE Program Team meets at least 5 times per year and includes the Program Manager, the Lead Family Health Program Coordinator(s), the Home & Garden Team and Teck Trail Operations Superintendent of Environmental Remediation (See Organizational Structures section).

Related programs are described under other sections, including:

* the Home & Garden Program;
* the Air Quality Program;
* Dust Suppression and Community Greening.

### A map showing the location of Family Health Program services is attached as Appendix F-Map. (Please note that we should designate the communities of Oasis, Casino and Waneta.)

### Each of the Family Health Program components is described in detail below.

### Family and Caregiver Education and Engagement

Education and engagement of expectant parents

* Presentations and distribution of information to pre natal and post natal groups (1/month at the local pregnancy outreach program Building Beautiful Babies; on request at pre natal groups)
* Participation in educational events for expectant parents (3/year) at Kootenay Boundary Regional Hospital
* Opportunity to assess needs for parent support and provide information on programs for early childhood development, children’s health, and lead exposure prevention

Education and engagement of parents, young children and health & social service providers and others working with or caring for young children

* Presentations, handwashing displays, and distribution of information to parenting groups (Strong Start); school entry wellness events for 3 & 4 year olds (Ready Set Learn); THEP Home & Garden events; and annual Beaver Valley and Trail Teddy Bear Picnics
* Support for public health nurse handwashing displays for daycares, nursery schools, schools and general community awareness
* Most educational activities are conducted in collaboration with the Home & Garden Team.

The geographic area covered by these educational activities is the Lower Columbia region.

Supporting educational materials are listed in Appendix F-1. They include:

* THEP Lead & Your Family’s Health brochure
* THEP Rack Card introducing the Healthy Family Healthy Homes program
* THEP Rack Card with website url
* THEP Home Renovation Support Program brochure
* THEP Lead & a Healthy Diet (occasional use)
* THEP Fridge magnets
* THEP handwashing stickers “Come Clean Lather Up”
* THEP newsletters
* Soap
* Specific IH Public Health materials, depending on need/request

### Primary Prevention Home Visits

“Healthy Families” in-home visits program (part of the Healthy Families Healthy Homes program – see Home & Garden section)

* New program started in April 2013 in response to US CDC guidance to increase primary prevention activities in communities where children’s BLLs test > 5µg/dL
* Visits are offered to every family in Trail and Rivervale with a child under 12 months of age
* Visits include education, advice, brief in-home environmental assessment for referral to the Home & Garden program, and provision of information and healthy development supplies for parents/caregivers to strengthen children’s healthy development and prevent lead exposure
* Educational topics include healthy nutrition, hand washing, keeping dust down in the home and yard, and how to access other public health services for young children/families & early learning programs available in the community
* Engagement of parents/caregivers in conversation about their children’s health and development issues and needs - eliciting and responding to parents/caregivers’ questions on preventing lead exposure and strengthening children’s healthy development.

The geographic area covered by the Healthy Families in-home visit program is Trail and Rivervale. See map F-Map.

Supporting educational materials include:

* same as 1.1.1
* THEP Healthy Families Healthy Homes poster/”checklist” for families (Appendix F-2)
* Healthy Development Supplies - plate, bowl, doidy cup, blanket, ball, bib
* Greater Trail Parent Child Early Learning Programs map
* Trail & Castlegar Childcare Resource and Referral Program Newsletter
* Greater Trail Family Literacy Calendar
* Info to sign up for IH Health Matters Newsletter (on-line resource)
* US CDC Parent Handout re. Blood Lead Levels in Children

Forms used include:

* IH referral forms for other services
* IH Healthy Families visit checklist (draft – to go in Appendix F-2 when finished??)
* Referral forms for Infant Development Program, Building Beautiful Babies, Pre Natal Registry
* Kidsport, Jump Start, and Stars for Success subsidy forms for fee-based sports and arts programs for young children

### Children’s Blood Lead Testing

Annual fall blood lead testing clinic

* Clinic takes place over 3 weeks in September and October at the Kiro Wellness Centre in Trail. Timing of clinic is determined by research concluding that September is the time of year with highest BLLs in the community. (what research? – ask Steve for reference)
* Clinic targets children aged 6 – 36 months living in Trail and Rivervale. Parents of older children up to age 5 and/or living outside the target area may request testing and are welcome to attend. Children new to the community or living in homes undergoing renovations or with recent renovations in Greater Trail are encouraged to attend.
* IH laboratory technician and adminstrative assistant support the testing
* The clinic is also an opportunity for education and relationship building. The Home &Garden Team participate and, on occasion, additional professionals from IH Public Health and local early learning programs
* Preferred testing method is venipuncture. When venous access not possible or declined by parent, capillary sample is obtained
* A clinical trial of a Point of Care testing technology was conducted in Fall 2011. Many parents and our health professionals preferred this method. Unfortunately, the Point of Care trial showed that the test results were not precise enough at the blood lead levels we currently see in Trail. THE Program continues to monitor advances in Point of Care testing technology.
* Clinic tests approximately 190 children currently, including 120 from the target population, and 70 from outside the target area or age range. The clinic targets approximately 170 children. The participation rate for Areas 2 and 3 combined is currently 73%. THEC has a target, approved through community consultation, to have a clinic participation rate of 75% from the target population.
* Preparatory activities conducted from April to September include compilation of database of families from 5 databases (iPHIS/Panorama, Meditech, BC Ministry of Health Data as per Data Access Agreement, Trail Blood Lead Program database, and Lead Family Health Coordinator spreadsheet), ordering lab supplies and equipment, ordering supplies and family-friendly give aways, invitation letter with appointment time, reminder calls for the appointment, additional tracking of families as needed if invitation letters are returned to IH, and promotion of clinic.
* The clinic is promoted through personal contact with parents/caregivers, posters distributed throughout the community (library, physician offices etc.), promotion through newsletters and websites of early learning program providers and other allied agencies, and notices in the THEP community newsletter.
* Follow up includes laboratory analysis of results at BC Women & Children’s Hospital, communication of results to families, arranging case management visits as needed, compilation of community-wide results into report for presentation & distribution.

Annual winter follow-up clinic

* Clinic takes place over 1-2 weeks in February at the Kiro Wellness Centre
* Targets children receiving case management and children under 6 months of age at the time of the fall clinic. Similar but smaller scale preparation and follow-up. Results are not compiled into a report for the public. Timing of clinic is approximately 5 months after fall clinic. Research indicates that BLLs are typically lower at this time of year.
* Clinic currently targets approximately 100 children and tests approx. 65 children

Fall 2013 one-time clinic for Warfield, Oasis, Casino and Waneta

* Purpose of clinic is to determine if children in Area 1 communities have BLLs > 5µg/dL. Current US CDC guidance (see Appendix x) is that children testing > 5µg/dL should receive ongoing monitoring (testing) of BLLs and receive supports. See Appendix CE-4 for THEC news release announcing this clinic.
* Clinic to take place in conjunction with 2013 fall blood lead clinic
* Clinic to target children aged 6-36 months living in Warfield, Oasis, Casino and Waneta
* Similar preparatory work with target population of 54 children to be invited to the clinic
* Additional awareness and engagement activities with elected officials, residents and families in Area 1
* Follow-up to include specific section of Fall BLL Testing Report and adaptive management decisions based on the results of testing

Note: Materials developed and/or used to support the blood lead testing clinics include:

* invitation letter to parents, with Lead & Your Family’s Health brochure
* most recent fall newsletter with clinic info
* clinic poster
* materials handed out at the clinic (referenced in 1.1.1)
* TBL Program Blood Specimen Lab Transfer form for each clinic sent to the lab with the blood samples (Appendix F-3a).
* TBL Program Blood Specimen Transmittal slip – blood sample number verification form for each child attending the clinic (Appendix F-3b)
* TBL Program Call for Clinic Appointment slip for each child scheduled (Appendix F-3c)
* IH Authorization for Release of Information form to be signed by each parent authorizing IH to release parent name, address, phone number and e-mail and child’s DOB to the Trail Area Health & Environment Program and SNC Lavalin Environmental division (Appendix F-3d)
* results letter templates (Appendix F-3e)
* most recent report to THEC - Nov 2012 (Appendix F-3f)
* most recent news release to the community – Nov. 2012 (Appendix CE-5)
* documentation re. one-time clinic

Please refer to map F-Map for a description of the geographic areas described.

### Case Management

Support for families to reduce lead exposure

* Case management is offered to families where children’s blood lead levels test ≥ 10 µg/dL for children aged 12-36 months, ≥ 7 µg/dL for children aged 6-12 months, or where the BLL increases by ≥ 3µg/dL between two successive fall clinics.
* Support consists of two Case Management in-home visits, one by the Lead Family Health Program Coordinator and one by the Home & Garden Team. The Program Team conducts case management conferences, as needed, to determine appropriate supports and follow-up
* The visits include home environmental assessment and soil assessment to determine the exposure pathway(s). Soil remediation may be offered based on the results of the soil assessment.
* Other supports may be provided on a case by case basis including offering vacuums, sandboxes, flooring replacement (supplies only)
* Case management children are monitored until they test < 10 µg/dL at a fall clinic or the family chooses not to continue testing

Support documentation and materials for case management include:

* Those listed in 1.1.1 and 1.1.2 (more or less)
* IH Trail Lead Health Services Lead Exposure Reduction Plan – case management checklist (Appendix F-4a)
* Narrative charting folder for each child, kept on file at IH
* THEP Home & Garden report from yard & garden soil assessment, as needed

The geographic area where case management is provided is Trail and Rivervale. Please refer to map FH-Map.

### Community Collaboration on Early Childhood Development

The Family Health Program Coordinator participates in Greater Trail Success by 6, the Family Action Network Working Group, and a variety of collaborative strategies to improve children’s healthy development. More detail is provided in the Community Engagement section.

Materials and documentation on family health related community collaboration include:

* FAN Vision (Appendix F-5a)
* FAN rack card (Appendix F-5b)
* FAN Strategic Plan (Appendix F-5c)
* Materials from Greater Trail Success by 6 and Early Years Office to promote early childhood development awareness for families

The geographic area served is the Lower Columbia region of Greater Trail and surrounding rural areas. Please see map FH-Map.

### Community Outreach and Communications

The Family Health Program Coordinator places priority on communication and collaboration with other sectors of the community, including responding to requests for presentations and participating in non-traditional collaborations to achieve goals. The Family Health Program is emphasized in all of THE Program’s main communications strategies, including the community newsletter, website, radio ads, brochures, displays, events, and media releases. More information is provided in the Community Engagement and Outreach section.

### Monitoring, Evaluation and Adaptation for Continuous Improvement

Program monitoring and evaluation:

* annual children’s blood lead testing is the main monitoring and evaluation methodology, tracking progress to achieve a community average of children’s blood lead levels of 4µg/dL and a clinic participation rate of 75% for children in the target areas (Trail and Rivervale) by 2015. See description in 1.1.3

Adaptive management for continuous improvement:

* The 2012 US CDC guidance led to a THEC discussion about improvements to THE Program to bring it into alignment with the new guidance. This discussion included a teleconference with Mary Jean Brown, Chief, Healthy Homes & Lead Poisoning Prevention Branch, US CDC (See Appendix F-7a for minutes). THEC issued a set of recommendations in Fall 2012 based on the results of that discussion (see Appendix P-1)
* THE Program Team practices adaptive management as a continuous improvement process. Program delivery activities are brought forward for internal review and refinement at regular (5+/year) Program Team meetings based on professional assessment by Program Team members and/or external feedback.
* THEC identifies program elements that may require review and potential refinement based on members’ assessment and/or external feedback.
* Interior Health reviews and refines Public Health programming on a regular basis, including services provided by the Lead Family Health Program Coordinator

Supporting documentation includes:

* 2012 blood lead testing report (Appendix CE-5)
* minutes of June 18 meeting and teleconference with Mary Jean Brown?? (Appendix F-7a)
* THEC recommendations (Appendix P-1)

### Summary of Historical Information

The history of the Family Health Program is well documented in Hilts, S., White.,E and Yates, C.; Evaluation, Identification and Selection of Remedial Options; Trail Lead Program; January, 2001, (referred to as “The Task Force Report”).

### Summary and Conclusions

The Family Health Program prevents and reduces health risks from young children’s exposure to lead in Trail and Rivervale, and contributes to improved early childhood development outcomes in the Lower Columbia region. The Family Health Program is delivered by Interior Health’s Lead Family Health Program Coordinator. Approaches include education, outreach and engagement of families; in-home visits for families with children under 12 months; children’s blood lead testing; case management in-home visits and supports to families; community and stakeholder collaboration; and communications. Most components of the Family Health Program are delivered in collaboration with, or support from, the Home & Garden Program.

Performance targets, approved by the community through public consultation in 2010, are:

* to have an average blood lead level of 4 µg/dL for children aged 6 months to 36 months in Trail and Rivervale by 2015
* to have at least 75% of children aged 6-36 months in Trail and Rivervale participate in the annual fall blood lead clinic by 2015

The Family Health Program has been operating since 1990, offering education and case management in the first year. Annual community-wide testing of children’s blood lead levels began in 1991. Many of the approaches, strategies and specific activities of the Family Health Program were determined through research and assessment conducted in the 1990s and summarized in the Task Force Report (2001). Based on 2012 guidance from the US CDC, the Family Health Program has added a new in-home visit program targeting families with children under 12 months of age in Trail and Rivervale. Also, a one-time blood lead clinic for children in Warfield, Oasis, Casino and Waneta is planned for fall 2013 to determine if the blood lead levels of children aged 6-36 months exceed 5µg/dL and would therefore warrant expansion of programming to those communities.

### References

Advisory Committee on Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention Report; Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention; US CDC; January, 2012.

Hilts, S., White, E. and Yates, C.; Evaluation, Identification and Selection of Remedial Options; Trail Lead Program; January, 2001.

(I’m guessing that the Pathways Study and HHRA should be included here and referenced briefly in the historical summary 1.1.8. I have questions about how the literature review will be referenced in the Plan and what needs to be described in the programming sections).

### Contacts

Please refer to Table 1-1 for more information or to obtain copies of the referenced documents.

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| --- | --- | --- | --- |
| Table 1-1 Contact Information for the Family Health Program | | | |
| Program Area | Contact Person | Contact Phone Number | Contact Email |
| Trail Health and Environment Program General Information | Mark Tinholt | 250-364-4385 | [Mark.Tinholt@Teck.com](mailto:Mark.Tinholt@Teck.com) |
| Family Health Program, including blood lead testing, primary prevention, education | Jeannine Stefani | 250-364-6223 | [Jeannine.stefani@interiorhealth.ca](mailto:Jeannine.stefani@interiorhealth.ca) |

**Supporting Documents Appendix F –**

**Map** – See attached Family Health Fact Sheet Note: need to update the map to add the names of Oasis, Casino, Waneta

1. Family and Caregiver Education and Engagement
2. THEP Lead & Your Family’s Health brochure
3. THEP Rack Card introducing the Healthy Family Healthy Homes program
4. THEP Rack Card with website url
5. THEP Home Renovation Support Program brochure
6. THEP Lead & a Healthy Diet (occasional use)
7. THEP Fridge magnets
8. THEP handwashing stickers “Come Clean Lather Up”
9. Primary Prevention Home Visits
   1. Healthy Families Healthy Homes poster
   2. Healthy Families internal checklist (when finalized)
10. Children’s Blood Lead Testing Jeannine, please send
    1. TBL Program Blood Specimen Lab Transfer form for each clinic sent to the lab with the blood samples (Appendix F-3a).
    2. TBL Program Blood Specimen Transmittal slip – blood sample number verification form for each child attending the clinic (Appendix F-3b)
    3. TBL Program Call for Clinic Appointment slip for each child scheduled (Appendix F-3c)
    4. IH Authorization for Release of Information form to be signed by each parent authorizing IH to release parent name, address, phone number and e-mail and child’s DOB to the Trail Area Health & Environment Program and SNC Lavalin Environmental division (Appendix F-3d)
    5. results letter templates (Appendix F-3e)
    6. most recent report to THEC - Nov 2012 (Appendix F-3f)
11. Case Management
12. IH Trail Lead Health Services Lead Exposure Reduction Plan – case management checklist (Appendix F-4a)
13. Community Collaboration on Early Childhood Development
14. FAN Vision
15. FAN rack card
16. FAN Strategic Plan
17. Community Outreach and Communications

See Community Engagement section

1. Monitoring, Evaluation and Continuous Improvement

a. Minutes of June 18, 2012 meeting with Mary Jean Brown, US CDC