Children’s Environmental Health Working Group
Collaborative on Health and the Environment – WA (CHE-WA)
Thursday, November 10, 2016 9:30 AM – 11:30 AM
Location: Seattle/King County Public Health, Chinook Building Room 126, 401 5th Ave, Seattle 98104
Host group: Nicole Thomsen, Seattle/King County Public Health and Megan Dunn, NCAP
Speaker/Presentation: Megan Dunn, Northwest Center for Alternatives to Pesticides (NCAP) and Jeremy Moberg, owner, producer and marketer of Cannasol Farms, Okanagan, WA, an organic outdoor cannabis farm. Washington Sungrowers Industry Association, and member of the Pesticide Working Group of the Washington State Liquor and Cannabis Board (WSLCB)
Topic: Update on Pesticides in Cannabis in Washington State

CHE-WA Children’s Environmental Health Working Group: Our mission is to work collaboratively with diverse groups to eliminate children’s harmful environmental exposures in the Puget Sound region and beyond during their most critical developmental years: preconception to age 8.

Attendees in-person:

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Laura Costello-Kent</td>
<td>UW Bothell - students from Karen Bowman’s Health Policy &amp; Procedure class</td>
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<tr>
<td>Megan Dunn</td>
<td>Northwest Center for Alternatives to Pesticides (NCAP)</td>
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<td>Meheist Fesseha</td>
<td>UW Bothell</td>
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<tr>
<td>Steve Gilbert</td>
<td>Institute of Neurotoxicology and Neurological Disorders (INND)</td>
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<tr>
<td>Carolyn Gleason</td>
<td>Health Resources and Services Administration (HRSA)</td>
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<td>Sally Goodwin</td>
<td>Family doctor, Whidbey Island</td>
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<tr>
<td>Lindsey Greto</td>
<td>Public Health - Seattle &amp; King County Chronic Disease &amp; Injury Protection</td>
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<tr>
<td>Marilyn Hair</td>
<td>UW Exposures, Diseases, Genomics &amp; Environment (EDGE) Center (Notetaker)</td>
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<td>Nigisty Hayros</td>
<td>UW Bothell, works at St. Joseph Medical Center</td>
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<td>Weston Horton-Prouty</td>
<td>UW Bothell</td>
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<tr>
<td>Nick Mosely</td>
<td>Confidence Analytics, analyzes cannabis products for cannabinoids and pesticide concentrations</td>
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<td>Christopher Parks</td>
<td>UW Bothell</td>
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<td>Ronda Prentice</td>
<td>UW Bothell</td>
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<tr>
<td>Chris Sheets</td>
<td>UW Bothell</td>
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<tr>
<td>Fran Solomon</td>
<td>The Evergreen State College - Tacoma</td>
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<tr>
<td>Nicole Thomsen</td>
<td>Public Health - Seattle &amp; King County</td>
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<tr>
<td>Susan Turner</td>
<td>City of Seattle</td>
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<tr>
<td>Arthur Wendel</td>
<td>Agency for Toxic Substances and Disease Registry, Division of Community Health Investigations</td>
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Attendees by phone:
Nancy Bernard  WA State Department of Health
Linda Dix Cooper  British Columbia Center for Disease Control
Brian Feder-Check  EPA Children’s Environmental Health
Michelle Gaither  PacNW Pollution Prevention Resource Center (PPRC)
Eric Johansen  Washington State Dept of Agriculture
Elizabeth Long  WA State Department of Health
Rachel Koller  Cleaning for Health
Jeremy Moberg  Cannasol Farms, Okanagan, WA
Lorelei Walker  CHE National

Opening
Nicole Thomsen welcomed the group and gave an introduction to CHE-WA, its work and the forums CHEWA has sponsored, and the monthly meeting time and format. Nicole facilitated the agenda.

Next meeting is December 8th, hosted by Carolyn Gleason at the Health Resources and Services Administration (HRSA), in the Columbia Tower, 701 5th Ave, (tallest building downtown). The meeting is on the 15th floor in the Rainier Room. An escort will meet you in the lobby. The program will be (1) Lorelei and Gail presenting their CHEWA program from the WA State Public Health Association meeting in October, and (2) hearing about emerging issues in environmental health in the northwest, considering the outcome of the presidential election, facilitated by Steve Gilbert.

Group Discussion
Following brief introductions, Nicole reminded the group that Gail Gensler is stepping down from organizing the CHEWA group at the end of 2016. Gail helped establish CHEWA and has facilitated the group for 9 years. Nicole proposed a new structure:

Nichole Thomsen and Arthur Wendel will share the leadership role

Stephanie Edlund (Seattle-King Co PH) and Marilyn Hair will share the administrative role

Arthur Wendel moved and Steve Gilbert seconded to accept the new leadership team. Motion passed unanimously. Lorelei Walker offered the support of CHE-National.

Arthur and Lorelei are working to create a CHE email account (collabhealthenvwa@gmail.com) to send meeting invitations, in hopes the invitations reach members’ inboxes. Lorelei explained that there are 2 emails lists associated with CHEWA, the CHEWA email list with invitations to monthly CHEWA meetings, and the NW Kids CHEWA list serve with NW environmental Health news. The NW Kids list has the option of individual emails or a weekly digest. Sign up on the CHEWA website, www.chewa.org.

Announcements
Native Americans, Climate Change, and the Dakota Access Pipeline meeting Monday, Nov 28 at the King County Administration Building
This new webpage has some nice resources: President’s Task Force on Environmental Health Risks and Safety Risks to Children.  https://ptfceh.niehs.nih.gov/

Updates

**Carolyn Gleason (HRSA)** With the change in federal administrations, work is slow right now.

**Arthur Wendel (ASTDR Regional)**

Arthur is working on 2 projects (1) Safe siting for childcares. For example, one former elementary school is now a marijuana growing facility. If it would become a school again, the building would need remediation. (2) Engaging tribes in environmental health planning to create safer policies. They are presently working to identify 3 tribes in WA to partner with.

**Fran Solomon (TESC-Tacoma)** is teaching a course for the Osher Lifelong Learning Institute at the UW, *Chemicals That Disrupt Hormones: Health Impacts and How to Reduce Exposure*. The topic is endocrine disrupting chemicals. The class will meet 4 Mondays beginning January 23 from 1-3pm at the Burke Museum. Registration is $40 at [www.usher.uw.edu](http://www.usher.uw.edu).

**Chris Sheets** works at Harborview where many patients are cannabis users. He is a students at UW Bothell and came today to hear the speakers.

**Steve Gilbert** reported that Toxipedia is merging with CHE. The 2 groups will integrate their websites and CHE will take over Steve’s book, *A Small Dose of Toxicology*. Steve also reported that there is a marijuana article on the Toxipedia website.

**Weston Horton-Prouty**, a student at UW-Bothell, is a nurse. He is interested in how children are affected by cannabis use and pesticides in cannabis, and by cannabis farming.

**Christopher Parks**, is a student at UW-Bothell, UW educator, and a parent of teenagers.

**Laura Costello-Kent** is a nurse at Swedish and a parent, and is interested in the impact of marijuana.

**Sally Goodwin** has belonged to CHEWA for some time and came today to learn more about the effects of marijuana use.

**Lorelei Walker** announced that the new CHE website will launch next week. The website is organized so users can see health issues and disease endpoints, and health impacts of environmental exposures.

**Nancy Bernard**’s work at DOH encompasses school safety for environmental health and air quality. She facilitated 10 workshops for public school staff that covered integrated pest management, zoonotic diseases, shelter in place, legacy toxic substances, playground safety and indoor air quality. She is concerned about the odor issue and air quality from drift from cannabis growing.

**Eric Johansen** is responsible for listing the allowable pesticides for cannabis and industrial hemp for the WA Department of Agriculture

**Michelle Gaither** works on resiliency planning for disasters for industrial manufacturers for PacNW Pollution Prevention Resource Center (PPRC). Michelle reported on the PPRC Pollution Prevention 25th Annual Regional Roundtable held in late October, [http://pprc.org/index.php/2016/pprc/regional-roundtable-2016/](http://pprc.org/index.php/2016/pprc/regional-roundtable-2016/). Ecology presented their work with retailers such as Home Depot to pull some products that contain toxins off the shelves, for example hydrochloric acid from cleaning products and selenium sulfide from shampoo.
Brian Feder-Check has been at EPA for several years. Recently he began to work with Gretchen Stewart on issues related to children’s EH (40% of his time). He and Gretchen are setting up priorities for him.

Marilyn Hair reported that the UW EDGE Center runs the ATHENA Project to train high school teachers in environmental health and provides a free curriculum for Health and Consumer & Technical Education classes. The EDGE Center received a 1-year grant from their funder, NIEHS, to work with tribes on EH issues around climate change, together with the University of Arizona.

Networking break

Presentation

Find the PPT presentation in the Meeting Presentations and Handouts section of the CHE-WA website. A summary follows:

- Northwest Center for Alternatives to Pesticides (NCAP) has no position on cannabis use
- Most cannabis in WA is grown indoors in warehouses
- Cannabis is prone to pests. The go-to solution is to use pesticides
- Indoor growing uses lights and is highly energy-intensive. The cannabis industry accounts for 4-6% of the electricity used in Washington. Very large carbon footprint
- States don’t have jurisdiction over pesticide regulation, but Feds don’t regulate cannabis because it’s illegal
- In new regulatory environment, Washington Dept of Agriculture will take over pesticide testing in the cannabis industry
- Jeremy Moberg reports that fairly benign pesticides are used on cannabis
- NCAP: Pesticides are not thoroughly tested and we don’t know their effects in cannabis
- There’s a lot we don’t know: pesticide use, source of the pesticides, health effects
- Only pesticides that are approved for all food crops can be used on cannabis
- The pesticide label is the law for its use
- Cannabis sampling for pesticides (Dec 2015-Mar 2016) found detectable amounts of pesticide in 73% of indoor samples and 40% of outdoor samples (published in exposé in The Stranger). It was noted that sunlight and rainwater break down/wash away pesticides in outdoor samples
- 10x higher pesticide levels found in cannabis concentrate vs cannabis flowers. 2-5x higher cannabinoid concentration in concentrate vs flowers
- WA State Health Youth Survey found no change in access to cannabis by youth before and after legalization
- Cannabidiol (CBD) and Tetrahydrocannabinoid (THC) cannabinoid profile is on the product package. Jeremy Moberg says it’s accurate
- There are many hundreds of cannabis strains with >100 active ingredients that have a synergistic effect on the user
- The science has a long way to go
- Some conclusions. See the powerpoint for more:
  a. Pesticides haven’t been properly tested
  b. Cannabis can be grown without pesticides
  c. Cannabis should be treated like an agricultural crop
  d. Growers need education
  e. Consumers need information about pesticide use in cannabis. Also about energy use.