Introduction and Welcome

Project Updates by Delta MERP Grantees

Sophy Pho gave an update on mercury exposure reduction activities that have taken place through the grant awarded to Lao Khmu Association, Inc. through the Delta MERP Small Grants program. Lao Khmu Association Inc. is a non-profit organization formed to address common needs among South Asian refugee families in the San Joaquin region. However, Lao Khmu Association Inc. also provides services to those who qualify for CalWORKS as well and therefore serves a broader population as well. Sophy Pho gave an update on Lao Khmu Association Inc.’s mercury exposure reduction project progress. Highlights include holding workshops on reducing mercury exposure, one-to-one meetings, providing information at community events, informational mailings, training community outreach advocates, holding a town hall meeting, participating San Joaquin Southeast Asian mixer meetings, meeting with regional representatives and distributing information at senior centers, Asian grocery centers, Asian hair salons, Asian restaurants and noodle houses, community centers, and local schools.

Sothea Ung gave an update on the activities that have taken place through the Delta MERP Small Grant awarded to APSARA—the Asian Pacific Self-development and Residential Association. APSARA was formed by Cambodian refugees and is a non-profit organization that provides social services for Cambodian residents in San Joaquin County as well as owns and operates a housing complex where over 1,000 people live. The grant awarded to APSARA includes translating Delta Mercury Exposure Reduction Program (Delta MERP) materials to Cambodian and recruiting and training community advocate to reach
low literacy (either low literacy for English or non-English languages) populations. Through his interactions with APSARA residents, Soothera Ung said that he was finding that many have heard of mercury before but have limited understanding of what mercury is or where it came from. Sothea Ung emphasized that the Delta MERP message is complex and includes abstract concepts and that work is ongoing to help residents understand all of the information conveyed in the advisories for fish consumption. APSARA regularly interacts with residents through monthly meetings and free lunches, allowing for continually reaching residents and developing an understanding of the advisories. Common feedback from the community includes that the serving size depicted on the advisory is too small compared to actual serving sizes.

One way that APSARA connects to the larger Asian community, and is distributing mercury exposure reduction information, is through community coordinators (part of APSARA’s community connector program) which connects APSARA to Cambodian Churches in the region. APSARA is also distributing Delta MERP materials at community events, including events at an Asian grocery center (SF Supermarket), posting information on APSARA’s facebook and along with existing APSARA programs that support CalFresh, Medicare and MediCal. APSARA is also translating a video done for Lake Nacimiento to Cambodian as well as assisting with sign posting and evaluation.

Lauren Hughes with the California Indian Environmental Alliance (CIEA) gave an update on implementing CIEA’s small grant. CIEA is working with Women, Infant and Children (WIC) Clinics in Solano County to incorporate Delta MERP messages into their WIC educational messages. Women, infants and children are the most sensitive population to mercury exposure. CIEA is employing the “train the trainer” approach and is providing trainings to WIC clinic staff and community members regarding mercury and the mercury advisories for consuming fish. CIEA has provided an eating fish safely curriculum with detailed instructions for trainers. CIEA is working with a consultant to translate all mercury exposure reduction materials to Spanish. Lauren Hughes shared the link to their most popular brochure http://www.ciea-health.org/wp-content/uploads/2014/04/Tribal-Health-Brochure-4-2012-Final.pdf. Lauren Hughes pointed out that the vouchers received through WIC clinics include canned tuna, which are not the best option. The WIC clinics have enthusiastically engaged in this project and have prioritized incorporating mercury exposure reduction activities into their services.

Presentation: “Mercury in the Delta: Where does it come from and what can we do about it?”

A presentation was given by staff from the Central Valley Water Board about the sources of mercury to the Delta and actions the Central Valley Water Board is taking to reduce and manage mercury in the Delta. Mercury is a toxic metal. While elemental mercury (inorganic) is toxic to humans and other living things, the main way most people in the United States are exposed to mercury is through consuming fish contaminated with methylmercury (the organic form of mercury).

Methylmercury is produced by naturally occurring bacteria (sulfate and iron-reducing bacteria) that live in sediment. From the sediment, methylmercury works its way up the food chain as large fish consume contaminated smaller fish. In the Delta, methylmercury is produced in wetlands, sediments submerged in open water, agricultural areas, and in urban runoff and wastewater treatment plants. However, most of the methylmercury in the Delta comes from rivers and streams that flow into the Delta, carrying methylmercury.
Most of the inorganic mercury in the Delta also comes from rivers and streams that flow into the Delta. Sources of inorganic mercury include naturally mercury enriched soils, locations where gold and mercury mining occurred in California, geothermal springs and deposition from the atmosphere. Mercury enters the atmosphere from natural emissions and emissions from local and global human activities (i.e., coal plants, power plants). The Central Valley Water Board has found that 97 percent of inorganic mercury in the Delta came from a source outside the Delta. Other sources include urban runoff, wastewater treatment and other municipal and industrial discharges.

The Central Valley Water Board focuses on reducing and managing the mercury in the Delta by enacting strategies that lower the amount of inorganic mercury introduced into the Delta and controlling activities related to methylmercury production and transport (loss). The Central Valley Water Board is currently focusing on California reservoirs and is developing plans for reducing and managing mercury and methylmercury upstream of the Delta. An example of a potential strategy for trapping mercury is using managed wetlands, which is being studied in Cache Creek by the Department of Water Resources as a flood control setline basin. The Department of Water Resources has found that these managed wetlands reduce the flow of methylmercury into the Delta by trapping it at the site. However the methylmercury trapped on site may be taken up by wildlife using the wetlands.

Managing and reducing mercury and methylmercury in the Delta is a complex issue in a dynamic system and involves focusing on many different sources such as sources upstream, methylmercury production in wetlands and open water, wastewater treatment plants, agricultural areas and urban areas. In addition, to control atmospheric deposition, international treaties are need for pollution control. The Delta MERP program was created to address human exposure now as removing and managing mercury in the environment is a long-term effort.

**Delta MERP Updates**
Delta MERP team members gave brief updates on the translation of fish consumption advisories, overarching educational messages handout, Delta advisory sign design process and 2016 grants program.

**Safe to Eat Fish Portal**
This presentation was rescheduled for 2016 to accommodate updates to the portal currently being made.