What’s New at the Center?

Listen for Life

The core research project expands the highly successful Dangerous Decibels (DD) program into a community-wide campaign called Listen for Life. This program is designed to be a whole-community health promotion approach to prevent noise-induced hearing loss (NIHL) and expands the classroom and web-based prevention education elements developed by Dr. Billy Martin and colleagues at the Oregon Hearing Research Center at OHSU. Prior research funded by the National Institute of Health evaluated the acceptability and cultural appropriateness of the DD curriculum in the tribal communities. Based on this developmental work, the classroom and web-based programs are augmented with a community-wide media campaign to reinforce the hearing protection messages to the 4th and 5th grade children and their families. Community members and leaders have assisted in the creation of a novel media campaign. Radio announcements, newspaper articles, and poster flyers will spread the messages of "Turn it Down," "Walk Away," and "Protect Your Ears." A community-wide evening event will be also held to educate parents and other adults about NIHL. Our first participatory community received the Listen for Life campaign in September and October. For more information on the Listen for Life campaign or Dangerous Decibels, visit www.oregonprc.org.
What’s New at the Center?

CDC Site Visit
Andrea Washington, Jean Smith, Diane Green, and Shantrice Jones from the CDC in Atlanta, GA visited the Oregon PRC team. On Monday May 10th, guests attended a lunch held at the Northwest Portland Area Indian Health Board (NPAIHB), the Center’s main partner. Visitors were able to meet with OHSU faculty, staff, and students, as well as directors and project staff at the NPAIHB. A round table discussion on the Center’s Core Research Projects, training and evaluation activities followed.

Day two of the site visit consisted of a visit to a nearby Indian Reservation. Bill Lambert, Tosha Zaback, and Linda Howarth accompanied our three guests to the reservation where they meet with Carol Sahme who leads the delivery of the Listen for Life campaign. The noise-induced hearing loss prevention project was discussed on the drive, along with aspects of other Center collaborations and partnerships related to the promotion of healthy vision, prevention of cancer, and community capacity building. A highlight of the visit was the group’s lunch with the elders where the CDC scientists talked for an extended time about community health issues. The group also toured the tribal community and made a visit to the tribal Museum.

Ms. Smith and Ms. Washington stayed in town for the rest of the week to attend the Community Campus Partnership for Health Conference held at the Marriott Downtown Waterfront Hotel. Dr. Tom Becker, PI of the Oregon PRC, attended the conference and Jessica Kennedy joined the CDC/PRC booth to promote The Center for Healthy Communities at OHSU.
2010 Summer Institute, June 14 – July 1, 2010

In partnership with the Center for Healthy Communities, the Northwest Portland Area Indian Health Board put on another successful Summer Institute! The 2010 Summer Institute (SI) hosted 105 American Indian/Alaska Native health professionals who participated in this three-week long research training. This year included a special track of eighteen ‘Pathfinders’ – a group of Arizona undergraduate, graduate and community health experts interested in cancer epidemiology.

Based on the expressed needs of past trainees, the 2010 SI curriculum underwent some key changes including these new course additions: Grant Management, Randomized Control Trials, Measuring Quality Improvement in Indian Health, and Intermediate Biostatistics: Concepts & Analysis. In addition, the 2010 SI also welcomed several new instructors. Dr. Linda Burhansstipanov (Western Cherokee) taught the Research Design and Grant Development course. Teshia Solomon (Choctaw) taught the Grant Management course. Drs. Jared Jobe and Shobha Srinivasan taught the Randomized Clinical Trials course. According to evaluations, the course additions were very well received. Follow-up evaluations will be conducted in January or February to test retention of materials.
The Oregon PRC won a significant award from the CDC Comparative Effectiveness Research Program!

The new project, **Comparing the Effectiveness of Telemedicine with Traditional Eye Care in Detecting Diabetic Retinopathy**, is an extension of the PRC’s current Vision Project. Read about this new research project in the Research Updates section.

**Conferences & Presentations**
1) October 18-19, OPHA: Dr. Bill Lambert, Jessica Kennedy and Tosha Zaback presented.
2) November 5, Public Health Seminar Series: Nichole Hildebrandt presented the H.E.Y project.
3) November 7-9, APHA: Drs. Becker and Lambert presented on the vision and hearing health projects.

**Staff Changes**
A big thank you and CONGRATULATIONS to Kaebah Orme who has left the PRC to attend Medical School at OHSU. We are happy to welcome new members to the team! Ga-lo Vann will serve as the Research Assistant for the Noise-Induced Hearing Loss Prevention Project. His goal is to obtain his MPH and return to serve his tribe, the Western Band of Cherokees in Tahlequah, Oklahoma. David Moore is the new Research Assistant for the Comparative Effectiveness Research Project (CER) at Devers Eye Institute. He has worked within an environmental health regulatory capacity as well as in the health promotion field. Christina Sheppler, PhD, serves as the new Research Associate for the CER at Devers Eye Institute. In 2009, she earned her PhD in Psychology from the University of Oregon, with an emphasis in judgement and decision making.
Comparing the Effectiveness of Telemedicine with Traditional Eye Care in Detecting Diabetic Retinopathy

Diabetic retinopathy, a complication of uncontrolled diabetes, is the leading cause of new blindness in working-age American adults. It is characterized by progressive damage to the retina, the light-sensitive tissue at the back of the eye. Early diagnosis and treatment reduces the risk of vision loss; however, half of people with diabetes do not get their eyes regularly examined, or are diagnosed too late for treatment to be effective.

Diabetes is more than twice as likely to occur in American Indians and Alaska Natives (AI/AN) than non-Hispanic whites. Diabetic retinopathy also disproportionately affects the AI/AN population. Many rural reservations are long distances from eye clinics which complicates residents’ ability to obtain annual exams. The researchers are exploring telemedicine, in which digital images of the retina are transmitted to doctors via the Internet, to eliminate the need for patients to travel to eye clinics. Partnering with tribal health programs and an eye care center, the team is comparing the effectiveness of telemedicine with traditional eye exams.

The researchers are continuing to follow 585 American Indians and Alaska Natives with diabetes at the Hunter Health Clinic in Kansas and the Yellowhawk Tribal Health Center in Oregon. The participants were randomly assigned to a telemedicine group or a traditional exam group. Those in the latter group are referred to local eye care providers, who conduct a traditional exam. Eye doctors administer eye drops to enlarge (dilate) the pupil so they can examine the retina; many people find dilation objectionable. The telemedicine group participants have their retinas imaged at a tribal health clinic by research assistants using a nonmydriatic camera, which uses special lenses and infrared light to take images of the retina through undilated pupils. The images are stored and later sent via the Internet to the Devers Eye Institute in Portland, Oregon, where eye doctors review them. Participants requiring follow-up care are referred to their eye-care provider.

The researchers will follow each participant to determine which diagnostic approach is more effective at detecting diabetic retinopathy. The center will also compare the two methods’ cost-effectiveness, including the costs incurred by the patient (such as lost wages during the time it takes to drive to and see an eye doctor), the health care provider (including equipment and the cost of a room for a telemedicine clinic), and third-party payers (insurance companies or the government). In addition, the researchers will administer a survey to determine the factors that affect adherence with annual eye exams.
The important nutritional benefits of wild salmon were presented in the context of the risks posed by chemical contaminants, and practical information on ways to reduce exposure in the preparation and cooking of fish where presented to roughly 100 K-12 teachers. In June, Bill travelled to Wellpinet on the Spokane Reservation to speak to the Cancer Coalition on environmental causes of cancer and the results of the cancer risk assessment from the salmon study. He presented current data from the Northwest Tribal Registry on cancer incidence and trends among American Indians living in the Spokane area and the State of Washington. The meeting was held in the longhouse and was attended by 50 community members, tribal leaders, and clinic staff and providers.

Native Children Always Ride Safe (CARS) Study
Observational surveys were completed among six Pacific Northwest tribes as part of the NARCH-funded CARS study. In 2009, investigators surveyed vehicles with child passengers age 8 and younger. Trained observers looked into vehicles to assess how the driver and passengers were restrained. Drivers were then asked about the child’s age, height, and weight, as well their opinions about child safety seats. Interviews lasted four minutes and drivers received a $5 gift card as a token of appreciation. Investigators found 63% of infants were properly restrained; forward-facing harness seat use increased to 60% (up 19%) from 2003; and 36% of booster-eligible children were properly restrained (up from 11% in 2003). The project team also conducted focus groups in the different communities and interviewed key people to learn more about community members’ attitudes and beliefs about child safety. Results from the surveys and focus groups have helped tribes design community-specific interventions to increase child passenger safety. Three tribes are implementing interventions from Fall 2009 until Spring 2011 (Round 11) while the other three will implement interventions from Fall 2011 to Spring 2013. There are three different ways that tribes are creating interventions: policy changes, readiness, and law enforcement. In Spring 2011 and Spring 2013, investigators will conduct two more rounds of observations to evaluate the impact of community interventions. Stay tuned for more updates!
Special Feature

Child Safety Restraints

In today’s society, we rely on many technological advances to make our lives easier and more enjoyable, including mobile phones, computers, televisions, and motorized vehicles. Cars, in particular, help us navigate our environments in a fast, easy way. However, cars can also pose serious threats to the health of the environment and to individuals, including the risk of serious injury to passengers and pedestrians. According to ACTS Oregon, “motor vehicle traffic crashes remain the leading cause of death in children age 3 and older.” Ultimately, the majority of fatalities involved children who were not restrained in vehicles. It is, therefore, quite important to teach communities, parents and caregivers about the steps they can take to ensure the safety of their children when driving in vehicles.

Lack of Restraints and Risks to Children

According to the National Highway Traffic Safety Administration (NHTSA) estimates, an average of 4 children age 14 and under was killed and 529 were injured in motor vehicle crashes in 2008. One of the goals of Healthy People 2010 is the universal use of child safety seats in cars, including infant/toddler seats and booster seats. Research demonstrates the risks of injury and death to children who are not properly restrained when riding in cars. Based on 2008 data, children aged 13-15 had the highest percentage of unrestrained occupants. Of the 342 fatalities among this age group, 70% (238) were not using restraints. Among children age 0-4, restraint use was known for 227 of the 240 fatalities and 40% of those children (74) were not using restraints. Finally, there were 214 passenger vehicle occupant fatalities among 4-7 year olds and restraint use was known for 197 of those deaths. Among this age group, 78 or 40% of the passengers were unrestrained. There is no doubt that the inappropriate use of child car restraints can lead to death and/or serious injury to children involved in car crashes (ACTS & NHTSA).
Child Safety Restraints

Types of Restraints
Child safety restraints range from infant/toddler seats to booster seats and seat belts for older children. NHTSA research has shown that child safety seats reduce fatal injuries by 71% for infants (less than 1 year old) and by 54% for toddlers (1-4 years old) involved in passenger car crashes. Booster seats reduce the risk of serious injury by 59%, and seat belts reduce injury risk by 69%. It is clear that restraint use has saved lives, but usage has not been at 100%. According to a study conducted in 2008, an additional 79 lives would have been saved had safety seat use among kids under 5 had been at 100%. Each state has enacted child safety restraint laws.

The guidelines below describe the type of car restraint that is required by law.

<table>
<thead>
<tr>
<th>Age</th>
<th>Seat</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants</td>
<td>Infant seats &amp; rear-facing convertible</td>
<td>In rear-facing seats until at least 1 year of age and 20 pounds. If child</td>
</tr>
<tr>
<td></td>
<td>seats</td>
<td>reaches maximum weight, switch to rear-facing convertible seat.</td>
</tr>
<tr>
<td>Toddler/</td>
<td>Convertible seats &amp; forward-facing</td>
<td>Best to ride in rear facing seats as long as possible per manufacturer’s</td>
</tr>
<tr>
<td>Preschooler</td>
<td>seats with harnesses</td>
<td>instructions. When out grown, switch to forward-facing seat with safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>harness.</td>
</tr>
<tr>
<td>School-aged</td>
<td>Booster seats</td>
<td>Used when forward-facing seat outgrown. Children should remain in booster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>seat until adult seat belts fit correctly (usually when the child is 4’9”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and between 8-12).</td>
</tr>
<tr>
<td>Older children</td>
<td>Seats belts</td>
<td>Use lap and shoulder seat belt in the back seat until 13 years of age.</td>
</tr>
</tbody>
</table>
Why Kids Aren’t Properly Restrained?

All parents want the best for their children and, certainly, their safety is of paramount importance. So, why are so many children inappropriately restrained in cars? There are several plausible explanations, including lack of education, financial issues, and inappropriate enforcement of child safety laws. Often, parents graduate their kids to more senior-level restraints too soon which do not provide accurate safety and support in case of an accident, increasing risks of serious injuries and fatalities.

In a study conducted by Kunkel et al at the University of Utah, 460 children were evaluated to determine which restraint was being used. Investigators found that parents should have been using a more junior level of restraint thirty percent of the time (Kunkel et al, Do parents choose appropriate automotive restraint devices for their children? Clinical Pediatrics. 2001;40:35-40). It is possible that parents may have limited knowledge as to what restraint is the most appropriate at each stage of a child’s life. The previous table is helpful but only useful if parents have access to it when they need it. Often, however, information about car seat safety is not widely advertised, and unless actively sought out by the parent (e.g. internet searches), not well advertised by health professionals even at routine wellness visits. Often, if parents don’t use seat belts, their children may be more likely to be improperly restrained or completely unrestrained (Lapidus et al 2005). Ultimately, educating all caregivers – parents, relatives, friends or sitters, is essential in preventing injuries and deaths due to motor vehicle accidents.

While parents’ lack of education may explain some cases of improper restraint use, it is not the only explanation. Finances may limit families from upgrading to newer seats, particularly booster seats. If they lack the funds, parents may keep kids in seats for longer than they should be, buy used or slightly damaged seats, or not buy restraints at all. In some cases, parents may know what the best type of restraint is for their child, but may be limited by the vehicle they own or can afford. For instance, in many rural communities, pick-up trucks may represent a large portion of owned or driven vehicles. Even though not all pick-up trucks allow for safe use of car seats, families may still transport their children in these vehicles because it may be the only vehicle the family owns or can afford. Certainly, some or all of these reasons may be contributing to the large percentage of unrestrained or inappropriately restrained children in vehicles. In many cases, adequate health information about appropriate car restraints for children will help people who may not know what is best for their child or who may need some more planning to purchase or fit their vehicles with the correct restraint.
Ensuring Proper Restraint Use

Communities can spread the word about proper restraint use and assist families in a variety of ways. Most commonly, car seat clinics are held throughout the year where caregivers can learn about proper car seat installment. Local media can play a role in changing unhealthy behaviors. TV ads and radio spots promoting proper restraint use can reach many community members.

Kids can also become advocates for their own safety. Educators can teach children about proper restraint use and, in turn, kids can remind their parents of safe practices. In 2008, The “Ollie Otter Child Booster Seat Safety” campaign targeted children grades K-4 in Tennessee. A series of child-friendly messages and images were distributed among children in these grades in an effort to raise their awareness of safety issues when traveling in a car. Results of this program demonstrated that children became aware of proper restraint use thereby making children their own safety advocates. Empowering children to be their own safety advocates can be an important way to foster changes at the adult level and remind caregivers of proper transportation practices when traveling with children. In addition, grassroots efforts such as marketing proper restraint use by health professionals at wellness visits, flyers in local retail shops or word of mouth among caregiver groups (e.g. community play groups or mommy-baby classes) may all be good ways to advocate for widespread child safety restraint use.

Ultimately, all community members need to pull together to help protect our children, our future generation. If caregivers and community members at large take ownership of our kids' safety, then it will possible to dramatically reduce the number of children who are injured or killed in motor vehicle crashes.

For information on child safety seats or car seat clinics in your area, visit ACTS Oregon at www.childsafetyseat.org/index.html. In addition, you can contact your local police department to inquire about any car seat clinics or interventions in your community. Don’t hesitate to contact your health care provider as well for any questions regarding your child’s safety.
A San Francisco native, Joann Malumaleumu is a vital staff member at Yellowhawk Tribal Health Clinic on the Umatilla Indian reservation. She is half Paiute/Umatilla Indian and is enrolled with the Confederated Tribes of the Umatilla Indian reservation. At Yellowhawk Tribal Health Clinic, Ms. Malumaleumu fulfills two important roles: Senior Caregiver Coordinator for the Umatilla tribe and Site Coordinator for the Northwest Tribal Vision Project (NWTVP). As the Senior Caregiver Coordinator, Joann provides information and assistance to caregivers about available community resources and support services, including counseling, support groups and training. In addition, she collaborates with the nine Oregon tribes and is responsible for hosting the Native Caring Conference. Now in its sixth year, the Native Caring Conference provides training for Indian Caregivers of tribal elders and grandchildren throughout Oregon, Washington and Idaho so they receive the support and encouragement they require. Ms. Malumaleumu is also responsible for managing the delivery of respite care to caregivers as needed.

In addition, Ms. Malumaleumu serves as Site Coordinator for the Northwest Tribal Vision Project based on the Umatilla Indian reservation in an Indian Health Service clinic. While working on the project Joann was selected to be the National Community Committee representative for the Prevention Research Center at OHSU. She is quite excited and honored to serve as the NCC representative. Also, Joann is a member of various committees including the Center’s Research Advisory Group, the Eastern Oregon Area Agency on Aging advisory council, and has been recommended to the Governor’s Commission on Senior Services. Although she is quite busy, Joann is happy to be part of an inspiring and passionate group of people who are advocating for underserved communities.

Born and raised in the Bay Area, Joann boasts a nomadic upbringing: spending her childhood in Eugene, OR, high school in Vancouver, WA and also living in Seattle while her mother received medical treatment. Currently, Ms. Malumaleumu happily resides in Pendleton, OR with her husband and three children. During her free time, she enjoys taking spur-of-the-moment road trips & enjoying what life has to offer with her family.
In The Next Issue

2011 Summer Institute

Annual PRC Meeting, April 2011

NARCH Contemporary NW Tribal Health Conference

PRC ‘Year in Review’

Up Close with Linda Howarth

Do you have any suggestions? Email Grazia Cunningham: grazia_cunningham@yahoo.com.

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