



## EEOP Newsletter

Environmental Education Outreach Program (EEOP)  
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Web version @  
<http://www.nau.edu/ecop/newsletter>

### **The Newsletter**

This newsletter is a service of the Institute for Tribal Environmental Professionals (ITEP) Environmental Education Outreach Program (EEOP). We've created this newsletter specifically for K-16 students, educators, and tribal professionals that are interested in learning more about environmental issues with a focus on air quality. The newsletter will also contain information about other EEOP programs and activities.

### **Surgeon General Warning: Secondhand Smoke Puts Children at Risk**

The Surgeon General recently released a major new report on involuntary exposure to secondhand smoke, concluding that secondhand smoke causes disease and death in children and nonsmoking adults. The report declares that the home is becoming the predominant location for exposure of children and adults to secondhand smoke.

The developing lungs of young children are severely affected by exposure to secondhand smoke for several reasons, including that children are still developing physically, have higher breathing rates than adults, and have little control over their indoor environments. Children receiving high doses of secondhand smoke, such as those with smoking mothers, run the greatest risk of damaging health effects.

Breathing secondhand smoke can be harmful to children's health including asthma, Sudden Infant Death Syndrome (SIDS), bronchitis, pneumonia, and ear infections. Children's exposure to secondhand smoke is responsible for:

- increases in the number of asthma attacks and severity of symptoms in 200,000 to 1 million children with asthma;
- between 150,000 and 300,000 lower respiratory tract infections (for children under 18 months of age); and,
- respiratory tract infections resulting in 7,500 to 15,000 hospitalizations each year.

The Surgeon General report emphasizes the importance of protecting children from all sources of second hand smoke. Researchers found that adult family members are the most frequent source of second hand smoke. Researchers also found that moving to another room or opening a window is not adequate protection for children.

The Surgeon General report concludes that there is no risk-free level of exposure to secondhand smoke. Nonsmokers exposed to secondhand smoke at home or work increase their risk of developing heart disease by 25 to 30 percent and lung cancer by 20 to 30 percent. The finding is of major public health concern due to the fact that nearly half of all nonsmoking Americans are still regularly exposed to secondhand smoke.

**The report finds that even brief secondhand smoke exposure can cause immediate harm. The report says the only way to protect nonsmokers from the dangerous chemicals in secondhand smoke is to eliminate smoking indoors.**

“The health effects of secondhand smoke exposure are more pervasive than we previously thought,” said Surgeon General Carmona. “The scientific evidence is now indisputable: secondhand smoke is not a mere annoyance. It is a serious health hazard that can lead to disease and premature death in children and nonsmoking adults.”

Copies of *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General* and related materials are available on the Surgeon General’s Web site at [www.surgeongeneral.gov/library/secondhandsmoke/](http://www.surgeongeneral.gov/library/secondhandsmoke/).

If you have questions about the health impacts of secondhand smoke, please contact Mansel.

### **Opinion: Editor’s Note on Smoking**

*I have long been an advocate of eliminating indoor secondhand smoke. I am a chronic asthmatic and I have been aware that secondhand smoke was bad for my health since I was a young child in the sixties. In the late seventies and early eighties it was difficult for me to find a smoke-free work environment. Smokers were in control and they saw no reason to consider the needs of the non-smokers. I was a young lieutenant in the US Army and soldiers in my platoon thought I was infringing on their “rights” to ban smoking during platoon meetings. In order to “survive” meetings with the company commander I had to wear a gas mask. All of the other unit leaders were smokers. I even filed a grievance with the Inspector General’s Office and I was laughed at, even though there was an army policy that restricted smoking during meetings if anyone objected.*

*Thankfully, things have changed a lot since my early work experiences; however, the ongoing debate in our local newspaper indicates that many smokers feel they still have the “right” to smoke in public places. I am determined that I also have the **right to live and breathe** and I strongly believe that **my right to live far exceed any smoker’s right to smoke**.*

*Additionally, I feel that smokers with young children have an obligation to stop smoking. If they cannot stop smoking, they should never smoke in the presence of the child or in any indoor space the child might occupy anytime in the future. Although the Surgeon General’s report didn’t address problems with residual smoke contamination after the smoker leaves an area, I am confident that eventually it will be recognized that even the residual smoke contamination is a serious health problem. Many hotels already levy fines against anyone that smokes in rooms designated as non-smoking.*

*If any of you have experiences or thoughts on the issue, we welcome your input.*

*- Mansel*

## **Indoor Air Quality – Short Internship Program (IAQ-SIP)**

Three tribal environmental professionals and fourteen students joined the EEOP staff on the Northern Arizona University (NAU) campus to learn about Indoor Air Quality (IAQ). Twelve of the students are in high school and two of the students recently graduated from high school. Four tribes were represented in the workshop: White Mountain Apache Tribe, Kaibab Paiute Tribe, Taos Pueblo, and Navajo Nation. Rich Prill, a building scientist with the Washington State University Cooperative Extension Service and recipient of an EPA Excellence Award for work on IAQ, was the lead instructor for the workshop.

The Indoor Air Quality (IAQ) workshop provided participants a practical approach to preventing and solving IAQ issues in schools and communities. The workshop included opportunities to apply the IAQ knowledge by conducting a building assessment of two nearby school buildings. The participants were introduced to a variety of instruments, including a carbon dioxide meter, a carbon monoxide meter, a particle counter, moisture meters, humidity meters, radon meter, and others. The participants received a workshop manual with materials and information that will help them as they return to their communities.

Each tribe will be borrowing an IAQ Assessment kit from EEOP and conducting building assessments in their community. The student interns will be paid after completing the building assessments and writing some reports. Information from the building assessments will be used to help the building manager and occupants to create a healthier environment by improving the building air quality.

The EEOP staff will be available throughout this school year to work with teachers and students to conduct air quality building assessments in tribal schools. Information from the assessment will be provided to the Principal, who will determine, what, if anything will be done.

If you would like to learn more about Indoor Air Quality (IAQ) contact Mansel.

## **Student Summer Interns**

The 2006 Student Summer Internship (SSI) program is coming to a close with rave reviews from both the interns and the host sites. Program Coordinator, Matthew Zierenberg was able to visit four of the eight interns and host sites during the month of July. During these visits he was able to see them in action doing site inspections, gathering weather and air quality data, making outreach calls, and most importantly working with excellent mentors. Each intern expressed their gratitude to the EPA, ITEP, and their host site for sponsoring this program.

The ITEP staff is looking forward to next summer. In order to share the excitement, we will spotlight a few of the interns from 2006 in future newsletters. These spotlights will allow you the chance to see the wonderful work these students have been doing and hopefully spark ideas for internship opportunities of your own. We will be recruiting both interns and host site agencies for the 2007 summer season beginning in October 2006.

If you would like more information about the ITEP Student Summer Internship program please contact Matthew or visit the EEOP website.

## **Spotlight – Intern with the Confederated Tribes of the Umatilla**

Ari van Schilfgaarde hails from Whitman College in Walla Walla, WA, where he is working on a BA of Physics-Environmental Studies. He has worked on many projects in the field of water and renewable energy during previous internships and undergraduate opportunities. However, this summer he found himself climbing a 180 foot radio tower on the Umatilla Indian Reservation, near Mission Oregon, to collect air data.

Ari was selected by the Confederated Tribes of the Umatilla Indian Reservations (CTUIR) Department of Science and Engineering. As an intern at CTUIR Ari has worked to update the tribes Emissions Inventory, gather ambient air data, and research the feasibility of wind power on the reservation. He has worked to build relations with the local industries and local people. According to John Cox, Director of the Air Quality at CTUIR, Ari has become “part of the family” very quickly due to his out going and energetic nature.

John Cox and Glen Gehring, CTUIR Air Quality Specialist, have worked with Ari on numerous projects and served as mentors for this internship. Of this mentoring relationship Ari commented, “I am extremely grateful for the chance to work with such a dedicated and supportive group of people doing things that I really care about.” Mentoring is a big part of all ITEP internships and projects. Good mentoring is a proven tool to build capacity in people and communities.

In speaking of Ari’s accomplishments at CTUIR, John Cox has only one word to say, “Remarkable”. When asked to elaborate, John went on to explain that Ari has skills both technical and interpersonal that he doesn’t see in many seasoned professionals. John also commented that Ari has “spoiled” them when it comes to interns.

ITEP and the people at the CTUIR Department of Science and Engineering would like to thank Ari van Schilfgaarde for his dedicated service and for raising our expectations of an intern.

## **Future Issues**

We are also interested in publishing articles from you. We are interested in articles sharing stories from students, teachers, or tribal professionals influenced by ITEP or EEOP activities. In the next issue we will provide a summary of services available from the EEOP staff.

## **Credits and Contacts**

The US Environmental Protection Agency (USEPA) Office of Air and Radiation provides part of the funding to make this newsletter possible. The newsletter is disseminated on various list serves, however, if you would like to join the newsletter list serve, contact [mansel.nelson@nau.edu](mailto:mansel.nelson@nau.edu).

Our staff looks forward to providing new services and developing new programs, as well as continuing existing programs. We especially look forward to hearing from you. So please visit our website at <http://www.nau.edu/eeop> or contact us via telephone or email.

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