# Online Proceedings

## POSTER SESSION 3

**Commons West, Easel 14**

*2:30 PM to 4:00 PM*

**Communicating Health Risks: Analyzing Ethnic News Media from Vietnamese, Spanish, and Somali Speaking Communities during the Heat and Air Quality Events in King County, Washington**

*Kim Anh (Kim) Tran, Junior, Environmental Studies, Public Health-Global Health*
*Mentor: Nicole Errett, Environmental and Occupational Health Sciences*
*Mentor: Tania Busch Isaksen, DEOHS*

King County is home to many non-English speaking populations. Language and cultural barriers must be accounted for in risk communication materials to limit adverse health risks following extreme weather events. During the summer of 2017, Washington experienced a heat wave and increase in air pollution from wildfires. In King County, exposure to extreme heat has been shown to increase risk of all cause mortality by 10%, while poor air quality contributes to 16% of all deaths worldwide.. Despite the growing evidence about communication with non-English populations during extreme weather events, research has yet to examine ethnic media outlets' approaches to communicating health risks. In Washington state, Spanish, Vietnamese, and Somali are the top 5 non-English languages spoken. In response, we sought to assess if and how local ethnic newspapers disseminated risk communication information during the 2017 heat wave and air quality event. We used descriptive statistics to compare the number of ethnic news media messages to the Seattle Times, the predominant newspaper in King County, and assessed the messages communicated based on air quality day. The research findings show that non-English newspapers included fewer risk communication messages, including on days with air quality levels known to increase health risks. On the other hand, the Seattle Times included messages about health prevention methods, daily weather forecasts, and informational articles on the cause of the events. Our findings suggest that there is a need to improve risk communication during wildfire and heat events to populations with limited English proficiency in King County. We recommend engaging members of non-English speaking communities to identify the best communication methods, and work with newspapers serving these communities to promote awareness during future extreme weather events.

## POSTER SESSION 3

**Commons West, Easel 16**

*2:30 PM to 4:00 PM*

**Food Waste and Disposal: Identifying Barriers though a School Waste Audit**

*Samara Danielle (Sam) Kleinfinger, Junior, Environmental Health, Environmental Studies*
*Mentor: Tania Busch Isaksen, DEOHS*
*Mentor: Nicole Errett, Environmental and Occupational Health Sciences*

The United States recycles or composts only a quarter of its waste, with the remainder being buried in landfills. Organics, paper, and plastics, which can be recycled and composted, comprise the three largest categories of landfilled materials. It has been demonstrated that familiarizing youth with proper waste disposal methods increases landfill diversion at school and home, resulting in behaviors that continue through adulthood. In this study, I used a solid waste audit to characterize the waste disposal of a large Washington middle school. Initially, I used a survey and focus group to better understand the research needs of this particular school. Targeted goals and specific research questions were then derived from these data, which had been collected from the school's green team. Fifteen students from the green team completed the survey, while seven participated in a focus group to further articulate their goals and aims. The overall goals were to reduce the school's total amount of food waste and improve sorting efficiencies. Research questions included: how much waste is improperly disposed of, which materials are misplaced most, and how well do teachers sort their waste compared to students. I then conducted the audit during Spring quarter. Waste was collected from three student lunch periods as well as the teacher's lounge and was then sorted into disposal categories, examined for contamination, and weighed. Data analysis included identifying barriers to disposal. In collaboration with the school's green team, I then used my findings to help inform the creation of more targeted and efficient interventions. Participation in the waste audit's design and analysis helped create a more meaningful experience for students to reflect on their own disposal habits. Hopefully, this research may act as a guide or template so other schools may incorporate waste audits into their own recycling or composting programs.