

Nursing and environmental
justice: Re-envisioning
engagement and action for
21st century practice

Oregon Public health Association Public Health
Nursing Section Conference: 5-15-2017
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Disclosures

- ❖ Nothing to disclose

Objectives

- ❖ Identify roles for nursing in environmental justice
 - ❖ EJ nurse research
- ❖ Advocacy for environmental justice in the 21st century
 - ❖ Define Environmental Justice,
 - ❖ Define voice,
 - ❖ Summarize the advocacy strategies

Environmental Justice

- ❖ Everyone has the right to live, work, go to school, worship in a safe and healthy environment, (Bullard 1994), or
- ❖ ...the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of **environmental** laws, regulations, and policies. (EPA)

Nursing work and EJ

- ❖ Occupational Health
- ❖ Sustainability in hospital waste (<https://noharm-uscanada.org/content/us-canada/nurses-welcome-kit>)
- ❖ Home visiting?

Climate Change



voice

“The ability to tell one’s own story in a way that clarifies oppression,”

“Ability to speak with the right to be heard”

Knaus (2011), Thompson (2008)

Nursing research and EJ

- ❖ Pubmed: 17 articles (8 in 2016-2017)
- ❖ Web of science: 5 articles



Clark, L., Barton, J. A., & Brown, N. J. (2002). Assessment of community contamination: A critical approach. *Public Health Nursing, 19*(5), 354-365.
doi:10.1046/j.1525-1446.2002.19505.x

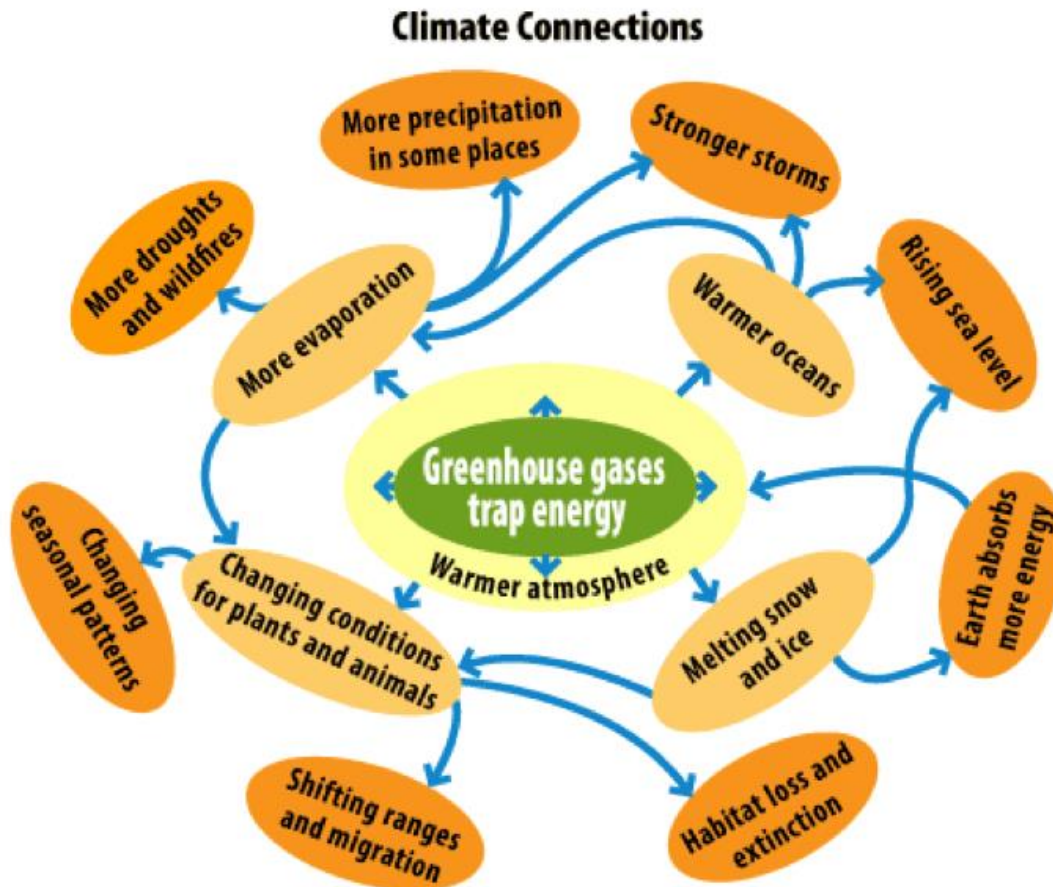
Powell, D. L., & Stewart, V. (2001). Children. The unwitting target of environmental injustices. *Pediatr Clin North Am, 48*(5), 1291-1305.

Nursing and Environmental health

- ❖ IOM 1995 (Nursing Health and the Environment)
- ❖ Alliance of Nurses for Healthy Environments 2008
- ❖ Leffers et al 2016 Nursing and environmental health

Author	Topic	
Anderko/Kuntz	Fish consumption and mercury in Great Lakes	Kuntz, S. W., Ricco, J. A., Hill, W. G., & Anderko, L. (2010). Communicating methylmercury risks and fish consumption benefits to vulnerable childbearing populations. <i>J Obstet Gynecol Neonatal Nurs</i> , 39(1), 118-126. doi:10.1111/j.1552-6909.2009.01094.x
Butterfield/Hill, W.	Childhood exposure to home contaminants	Butterfield, P., & Postma, J. (2009). The TERRA framework: conceptualizing rural environmental health inequities through an environmental justice lens. <i>ANS Adv Nurs Sci</i> , 32(2), 107-117. doi:10.1097/ANS.0b013e3181a3ae93
McCauley	Pesticide exposure farmworkers	McCauley, L. A., Lasarev, M., Muniz, J., Nazar Stewart, V., & Kisby, G. (2008). Analysis of pesticide exposure and DNA damage in immigrant farmworkers. <i>J Agromedicine</i> , 13(4), 237-246. doi:10.1080/10599240802473817
Primomo	Asthma and Indoor Air	Mar, T. F., Koenig, J. Q., & Primomo, J. (2010). Associations between asthma emergency visits and particulate matter sources, including diesel emissions from stationary generators in Tacoma, Washington. <i>J Environ Health</i> , 117(6), 445-448.

Climate Change



- ❖ Heat
- ❖ Water
- ❖ Insect
- ❖ Respiratory
- ❖ Mental Health
- ❖ Food security
- ❖ Natural Disasters

Figure 2: www.epa.gov/climatestudents/basics/concepts.html

Upstream action

- ❖ Health determinants (environmental-spacial, economic, cultural-ideologic, opportunity-potential)
- ❖ Actions:
 - ❖ Paradigms/beliefs
 - ❖ Priorities/goals
 - ❖ Transparency
 - ❖ Resource allocation
 - ❖ Metrics
 - ❖ Operations
 - ❖ Subsystem elements

Environmental Justice

- ❖ All people are entitled to fair treatment and meaningful Involvement and equitable treatment in regard to the regulation, implementation, and enforcement of environmental protections (EPA)
- ❖ all Americans have a basic right to live, work, play, go to school and worship in a clean and healthy environment (Bullard, 1993)

Asthma and EJ:

- ❖ Ambient pollution
 - ❖ Idling
 - ❖ 30% efficient pleated filters
 - ❖ Toxic cleaners
 - ❖ Fragrance free environments
 - ❖ Pets/no pets



10NS2 - Like Any Other Day

This picture depicts any ordinary day, on my way to school, this is often the road most travelled.

In this photo I wanna show the ignorance of those who decide to take it on themselves to know what's best for others.

Just like people seem to think they know everything about cars, and how they don't think twice how the fumes affect the air we breathe, some claim they know the effects of asthma and how it presents itself onto people and their lives. The road depicts how I like my asthma to be: smooth... but when it gets rough, I don't want it to escalate to something that can't be controlled.

Citizen Science Details

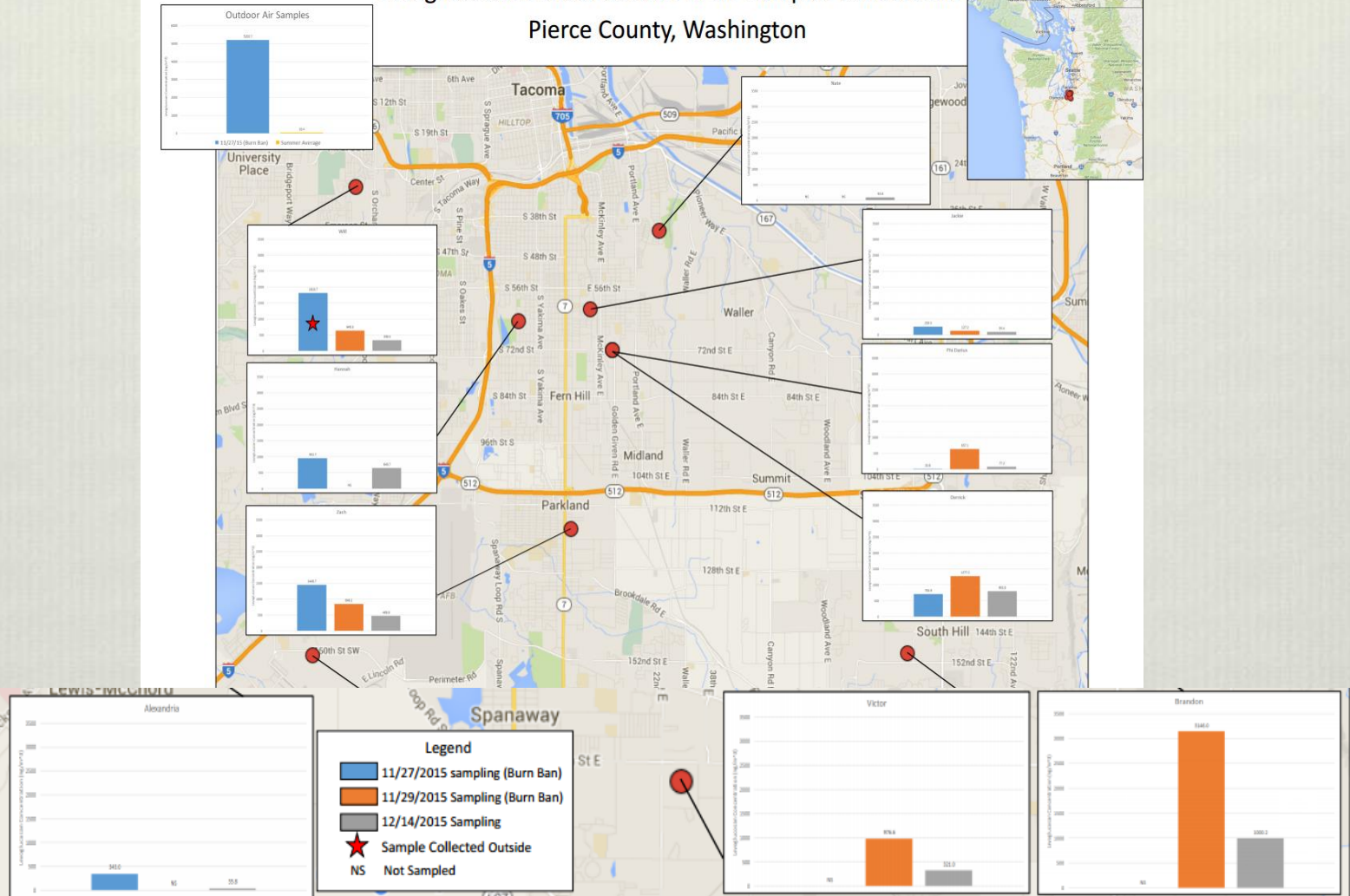
- ❖ Recruited 10 middle school aged students who live in Pierce County
- ❖ Trained recruits how to collect indoor air samples
- ❖ Collected series of air samples during burn ban events (Dec-Jan)
- ❖ Interpreted results with students
- ❖ Public presentation of results
and students' photos

Data Collection

- ❖ Occurred during winter holiday season (late november – december). Sampling machines placed in youth homes. Youth instructed to turn on sampling equipment simultaneously when a burn ban was called.

Levoglucosan

Levoglucosan Concentrations in Air Samples collected in Pierce County, Washington





No Going Back

As you can see from this picture on a sun-setting evening in Puyallup, it looks nice, it looks calming, but if we keep polluting the air here in Puyallup or anywhere it won't be a nice sun setting evening anymore and burning wood is a big cause affecting what a dark, gloomy, depressed Puyallup could look like if we don't change how we treat the air and there is no reset button, no going back to what we have done to the air or earth but we can at least help the situation and slow down the timer that was set for us and by us if we take action and make it apparent to the public about this scary problem.