

Problem Summary & Decision Context

- Health benefits/impacts resulting from community actions are often not well understood
- Communities need convenient access to high quality tools and information to:
 - Evaluate development choices
 - -Define problems
 - Prioritize interventions
 - Identify local environmental issues

Political Factors

Living & Working

Public Services

HEALTH

- Find solutions

How does a decision impact.

> ...and result in changes in our health and wellbeing?

Utility to Agency?

Age, Gender, Genetics Coping Care

- Community tools: Tribes and Regions, OEJ, communities
- Benefit/Impact assessment: OW, OAR
- Health Impact Assessment: Regions, communities
- Community engagement: Regions, communities
- Cumulative impact assessment: Regions/NCEA/communities
- Bioavailability: OSWER, Regions, communities

modeling

Environmental drivers of community health and well being

-Evaluate educational methods to help reduce health risks -Role of Race, ethnicity, neighborhood conditions and socioeconomic status for environmentally-driven health outcomes (e.g., asthma, cardiovascular disease, diabetes). -Cumulative risks and impacts such as the impact of diet and obesity, chronic stress and degraded ecosystems -NCER Cumulative risk research grants

Improving community health, well-being and exposure assessments.

Actionable Science for Communities

Community Public Health & Well-being – SHC 2.62 Tim Wade, Project Lead, National Health and Environmental Effects Laboratory Jim Quackenboss, Deputy Project Lead, National Exposure Research Laboratory

Future Directions

Community engagement, assessment and decision support tools

-Agency and public release and training provided for the Community-Focused Exposure and Risk Screening Tool (C-FERST) and Tribal-Focused Environmental Risk and Sustainability *Tool (T-FERST)*, including integration of *Community Cumulative Assessment Tool (CCAT)*. Upgrades and additional data layers to include public health, well-being, environmental

-Training, tools, data and best practices will be developed and expanded for *Health Impact* Assessments (HIA). Additional HIA case studies

-Community engagement and regional support through Regional and Applied Research Efforts (RARE) and Regional Sustainable Environmental Science (RESES).





-Rapid, reliable, and inexpensive methods for assessing the *bioavailability of metals* from contaminated soils and other exposure matrices.

-Health and well-being data acquisition and descriptions such as local and regional level morbidity and mortality rates for environmentally associated health outcomes (birth de asthma, cardiovascular disease, diabetes)

-Community vulnerability index for wildfire exposure

-Integrate near-source modeling with community based health assessments -NCER Healthy Schools RFA





Accomplishments

- Completed Proctor Creek's Boone Boulevard Green Street Project HIA in collaboration with Region 4
- Region 2/ORD collaboration on urban garden soil study
- beta testing for C/T FERST
- Cumulative risk assessment
- Key publications on: walkability, health burden of wildfire, bioavailability, community stress, social factors and health (see handout)



Partner Engagement Opportunities

- What are the challenges and needs for cumulative risk assessment? (OPP, OSWER, OAR, RSLs)
- Integrate/collaborate/complement NCER, NCEA guidelines
- How can Program Offices and Regions utilize decision support tools (OSWER, OEJ, OAR, OW, RSLs)
- How can we partner with programs and regions on updating community assessment tools, and community outreach and engagement?
- What interventions or actions are important to consider for impacts/benefit evaluation (OAR, OSWER, OW, RSLs)
- How can the HIA contribute to or integrate with Program and Regional needs? (RSLs)



Partner and community engagement, feedback and

cumulative risk research programs agency wide CRA