

C-FERST and Other EPA Tools: Facilitating Community Decision-making and Informing HIA Assessments

National HIA Meeting, HIA 101
September 25, 2013

Valerie Zartarian, Ph.D., and Florence Fulk, MS
US EPA Office of Research and Development

Justicia Rhodus, *CSS-Dynamac*

Community-Focused Exposure and Risk Screening Tool **C-FERST** (under development)



What is it?

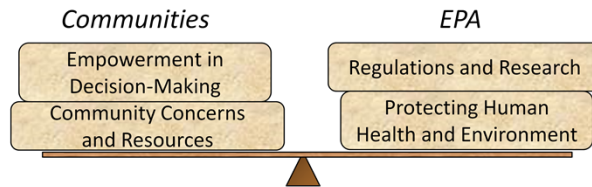
- Web-based “toolkit” that supports community assessments, providing easier access to information for 40+ environmental issues



9/25/2013

2

Community-Focused Exposure and Risk Screening Tool **C-FERST**



Why does it matter?

- Data and step-by-step guidance for informing community assessments and solutions
- Mapping of local exposures, health risks, and potentially vulnerable sites and populations
- Address challenges and needs identified by National Research Council, National Environmental Justice Advisory Council, others
- Venue for communicating EPA science, guidance, and solutions

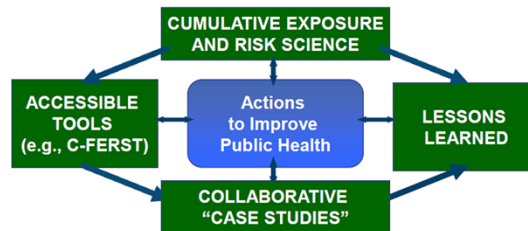
9/25/2013

3

Community-Focused Exposure and Risk Screening Tool **C-FERST**

What is the status?

- Regional and Tribal pilots; increasing number of requests
- On-going EPA Office of Research and Development research to populate tools
- **Development of a Step-by-Step HIA Roadmap in C-FERST**
- FY13/14 peer-review, public release, training



9/25/2013

4

Pilots to collaboratively build and test tool

- Springfield, MA, Brooklyn, NY, Portland, ME CARE grantees with R1&R2 project officers
- Part of Region 1 KPI pilot in Sustainable Knowledge Corridor; C-FERST maps being used in Springfield, MA school Health Impact Assessment to consider asthma confounders
- New Region 10 KPI pilot in Tacoma, WA including academic use by Evergreen State College
- Region 9 initiated a C-FERST workgroup
- Use of beta version by other CARE grantees, Boston University env. public health course
- T-FERST input and feedback from many tribes coordinated through OSP/Tribal Science Council
- ORD funded partnerships with United South and Eastern Tribes (USET; consortium of 26 tribes) and Pleasant Point Passamaquoddy Tribe, ME to design/test T-FERST
- interest from other Regions, and Program Offices; e.g. OAQPS wants so both tools can be used in EJ permitting and rulemaking process; OEJ interested – requested 2012 NEJAC briefing; EJ coordinators; new request for C-FERST to be part of EJ grants training; invited OSWER briefing planned for Sept.
- New request from State of PA DEP EJ advisory board for training on C-FERST

Public release planned for FY14 following FY13 external peer review; part of EPA activities for White House OpenGov initiative and mentioned in National Prevention Council action plan. Region 1 initiating a regional rollout and training plan to be shared nationally through RSLs; need similar plan for Program Offices.

Using C-FERST for HIA: A Step-by-Step Roadmap

U.S. ENVIRONMENTAL PROTECTION AGENCY
Community-Focused Exposure and Risk Screening Tool

Home | About Us | Contact Us | Search: All EPA | This Area | Go

You are here: [EPA Home](#) > [C-FERST](#) > [Using C-FERST Following Community Guidance](#) > [HIA Road Map](#)
[Click here to email comments on this page](#)

Using C-FERST for Health Impact Assessment

[What is Health Impact Assessment \(HIA\)?](#)

For each of the common steps in an HIA there are applicable resources and tools which can help you navigate through the Health Impact Assessment process.

Roll over the figure for a brief description of each step. Click on the steps for more details about how to use C-FERST with each step.

Click [here](#) for a printer-friendly version of all of the steps.

3. Assessment: Provides 1) a profile of existing health conditions that includes differences between various sub-populations; and 2) evaluation of potential health impacts that includes consideration of differential impacts for different sub-populations

(Adapted from: Human Impact Partners [Introduction to HIA](#) [EXIT Disclaimer](#))
Internet Explorer users: To open links on this page to resources from Human Impact Partners you will need to right click and select Open.

9/25/2013

5

Using C-FERST for HIA: A Step-by-Step Roadmap



Using C-FERST for Health Impact Assessment

(Adapted from: Human Impact Partners [Introduction to HIA Summary Guides](#) EXIT Disclaimer)
Internet Explorer users: To open links on this page to resources from Human Impact Partners you will need to right click and select Open.

- 3. Assessment of Health Effects:** To provide a profile of existing conditions data and an evaluation of potential health impacts.
Essential Tasks:
 - **Profile Existing Conditions** Research baseline conditions, including health outcomes and determinants of health disaggregated by income, race, gender, age, and place when possible
 - **Evaluate Potential Health Impacts** Use theory, baseline conditions, and population concerns; consider evidence that supports and refutes health impacts; assess affects by income, race, gender, age, and place; include assessments of the certainty, significance, and equity of impacts; justify the selection or exclusion of data/methods; identify data gaps, uncertainties, and limitations; allow stakeholders to critique findings

To view this step in Human Impact Partners HIA Summary Guide click [here](#). EXIT Disclaimer

[Click here to use C-FERST with this step](#)

The following resources in C-FERST could provide information for the HIA Assessment:

- [Exposure and risk-related maps](#)
- [Environmental Issue Profiles](#)
- [Community Data Table](#)
- **Draft HIA Tools Database (under development)**



Other EPA Tools That Can Inform Assessments

HIA Tools Database (under development)

- A compilation of tools, methods, models, that can be used in HIA
 - EPA-developed tools
 - Tools identified in the HIA Information Toolkit Working Group (2012 National HIA Meeting)
 - Tools identified in an EPA Review of 81 HIAs from four select sectors
- Promotes broader utilization of existing tools and resources to help close the data gaps found in HIA

Mapping Applications
Exposure/Health/Risk Models
Databases Indices
Models
Tools
Methods
Guidance Documents

9/25/2013

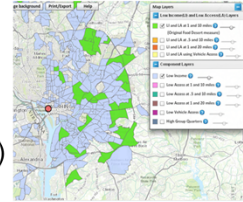
7

Examples of Tools That Can Inform Assessments

HIA Tools Database



- [Food Access Research Atlas](#) (USDA; maps food deserts and access to healthy and affordable foods)
- [Health Economic Assessment Tool](#) (WHO; estimates value of reduced mortality from regular walking/cycling)
- [Living Wage Calculator](#) (Poverty in America Project; estimates the cost of living in a community or region)
- [Traffic Noise Model](#) (FHWA; predicts/analyzes highway traffic noise)
- [My Environment](#) (EPA; provides a picture of local air, water, energy, and health data)



9/25/2013

8

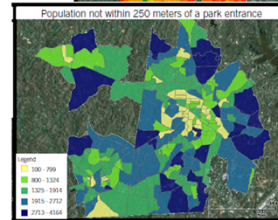
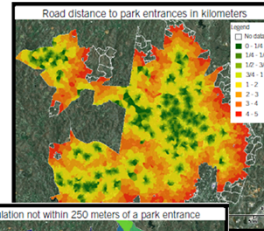
Other EPA Tools That Can Inform Assessments

EnviroAtlas (under development)

- Geospatial data, maps, research, and analysis on the relationships between nature, people, health, and the economy
- See and explore the benefits that humans receive from nature:

Ecosystem Services
 Clean Air
 Water Resources
 Hazard Mitigation
 Recreation
 Wildlife

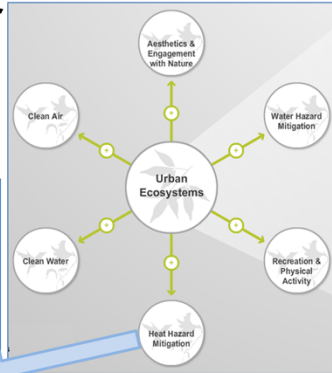
Culture and Aesthetics
 Conservation
 Climate
 Transportation
 Land Use
 Health



Other EPA Tools That Can Inform Assessments

Eco-Health Relationship Browser

- Interactive tool illustrating linkages between human health and ecosystem services—benefits supplied by Nature.
 - 4 Ecosystems
 - 6 Ecosystem Services
 - 30+ Health Outcomes
- Pop-up boxes illuminate ecosystem service linkages, with citations of relevant scientific studies



9/25/2013

10

C-FERST

Learn more and sign up to beta-test C-FERST:
www.epa.gov/heads/c-ferst

For More Info Contact:
zartarian.valerie@epa.gov OR
schultz.brad@epa.gov



Sustainable and Healthy
Communities. . .
One community at a time

EnviroAtlas

Learn more and sign up to beta-test EnviroAtlas:
[www.epa.gov/research/
enviroatlas/index.htm](http://www.epa.gov/research/enviroatlas/index.htm)

For More Info Contact:
enviroatlasbetatester@epa.gov
9/25/2013

**Eco-Health Relationship
Browser**

Learn more:
[www.epa.gov/research/
healthscience/browser/
introduction.html](http://www.epa.gov/research/healthscience/browser/introduction.html)

For More Info Contact:
jackson.laura@epa.gov

HIA Tools Database



For More Info Contact:
fulk.florence@epa.gov