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

Quickstart Guide

Office of Research and Development
National Exposure Research Laboratory

C-FERST Quickstart Guide

Table of Contents

Introduction to C-FERST

The Community-Focused Exposure and Risk Screening Tool (C-FERST) is an online tool developed by EPA's Office of Research and Development, in collaboration with stakeholders. C-FERST provides access to resources that can be used to help communities learn more about their environmental issues, gather information, and develop options for possible solutions. There are several components to C-FERST that allow users to: view maps of a community's environment, compare community environmental conditions, gather information, explore solutions and community strategies, and use community assessment guides.

C-FERST users include individuals with an interest in community environmental public health and a moderate degree of technical expertise to navigate the tool, as well as environmental professionals, state and local risk assessors, or EPA community involvement and environmental justice (EJ) coordinators working on local-scale issues. Community groups or members of the public and these professionals may benefit from working together to identify and evaluate issues and interpret C-FERST data and results.

Due to limitations in the data and information in C-FERST, it should not be used as the sole basis for making decisions about public health.

This Quickstart guide describes the main components of C-FERST. Each section describes how to navigate to a component of C-FERST from the C-FERST Home page, then describes its basic features.

C-FERST Home page

The Home page in C-FERST has several main options:

- **View** maps of your community's environment

    Provides examples of how to use C-FERST Maps to view your community's environment, followed by a link to the mapping tool.

- **Compare** local, county, state and national estimates

    Provides examples of how to use C-FERST Community Data Table to compare local estimates to state and national, and includes a link to the Community Data Table.

- **Gather** information about your environment

    Provides examples of how to use C-FERST Environmental Issue Profiles and find Methods for measuring local environmental conditions to collect information about your environment. It includes links to resources.

- **Explore** potential solutions and community projects

    Provides examples of how to find Exposure and Risk Reduction options, and projects that other communities have implemented. It includes links to appropriate resources.

- **Community Guides**

    Contains information on how C-FERST can be used in conjunction with community assessment guides, including EPA's Community Action for a Renewed Environment (CARE) Roadmap, and the National Association of City and County Health Officials (NACCHO) Protocol for Assessing Community Excellence in Environmental Health (PACE-EH) Guidebook.

- **Resources**

    Contains background information about C-FERST.

There are also boxes on the side of the web page with links to:

- Frequent Questions
- Quick Links for Returning Users
- Related EPA tools
- C-FERST Disclaimer

View Maps of Your Community's Environment

How to Access the Maps from the C-FERST Home page

1) Go to **View Maps of your Community's Environment.** This page contains a description and examples, followed by a button to **"Get Started: View Community Maps"**

2) Returning users can click the **Maps** link in the **Quick Links box** on the side of the home page

Basic Features of C-FERST Maps

Contact Us Share

You are here: EPA Home » C-FERST » C-FERST Maps of Community Environmental Conditions

C-FERST Maps of Community Environmental Conditions

Browser Requirements

Use the Map viewer below to explore maps that identify sources of pollution in your community and the surrounding area. These maps do not contain every map layer that may be important to a community; you may want to check with state or local agencies for data that could be added to the maps for a more complete picture of your community's conditions. **Please view the C-FERST Maps FAQs and User Guide prior to using C-FERST Maps.**

More Information

- C-FERST Maps FAQs
- Map User Guide (PDF)
- Description of C-FERST Map Layers (PDF)
- Examples uses of C-FERST Maps

View Map in Full Screen

ArcGIS ▾ DRAFT Community-FERST and Tribal-FERST Map   MODIFY MAP   👤 Sign In

Details | Basemap   Share Print Measure Bookmarks   Find address or place 🔍

About Content Legend

Contents

The plus and minus buttons allow you to zoom in or out.

The Modify Map button opens a menu for adding data to the map.

The search box is where you enter your location.

The Details button shows or hides the contents pane on the left side of the map, including the three buttons below it:
- Information about the map
- Map contents
- Map Legend

The Basemap button opens a gallery of different basemaps you can view.

The Bookmarks button allow you save locations (for your current session) so you can easily zoom back to those locations.

National Emissions
Water Quality Inventory
BEACH Environmental Health
Traffic Counts
Neighborhood Boundaries
Tribal Boundaries
State and Federal Boundaries
Demographic Data 2006 – 2010
Air Concentrations, Exposures, and Risks
EPA Smart Location Database
Health Outcomes (coming

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Refer to the C-FERST Maps User Guide for more detailed description of these features and how to use them.

Community Data Table

How to Access the Community Data Table from the C-FERST Home page

1) Go to **Compare Local, County, State and National Estimates.** This page contains a description and examples, followed by a button to **"Get Started: Use the Community Data Table."**

2) Returning users can click the **Community Data Table** link in the **Quick Links** box on the side of the home page

Basic Features of the Community Data Table

Once you have reached the Community Data Table page, you can enter your ZIP Code to generate a table like the one below:

You are here: EPA Home » C-FERST » Community Data Table

Community Data Table

Export to Excel | Export to PDF

The table can be exported to Excel or saved as a PDF file.

The default indicators in the table are based on EPA-related issues, stakeholder feedback, and available data.
There may be other important issues that are not currently included in this table.

Indicators and Indices	Your Community ZIP code: 48209	County: Wayne MI	State: MI	National Average	Data Info/Notes
▶ Environmental Concentration Estimates					
▶ Human Exposure Estimates					
▼ Health Risk Estimates					
Cumulative Air Toxics Cancer Risk* (risk per one million persons)	90.4	63.7	43.5	49.8	2005 NATA
Outdoor Air - Acetaldehyde Cancer Risk* (risk per one million persons)	3.8	3.2	2.6	3.3	2005 NATA
Outdoor Air - Arsenic Cancer Risk* (risk per one million persons)			1.06	1.3	2005 NATA
Outdoor Air - Benzene Cancer Risk* (risk per one million persons)	16.1	13.8	8.2	7.4	2005 NATA
Outdoor Air - (risk per one million persons)	3.0	3.4	1.9	1.9	2005 NATA
Outdoor Air - Chromium Cancer Risk* (risk per one million persons)	0.9	0.9	1.06	1.4	2005 NATA
Outdoor Air - Formaldehyde Cancer Risk* (risk per one million persons)	26.2	22.9	16.8	22.5	2005 NATA
Outdoor Air - Naphthalene Cancer Risk (risk per one million persons)	4.8	3.8	2.1	2.3	2005 NATA
Outdoor Air - (risk per one million persons)	3.5	1.8	1.2	1.5	2005 NATA
Cumulative Air Toxics Non-Cancer Respiratory Risk (Hazard Quotient²)	3.2	2.8	1.6	2.3	2005 NATA
Outdoor Air - Acetaldehyde Non-Cancer Respiratory Risk (Hazard Quotient²)	0.2	0.2	0.1	0.2	2005 NATA
Outdoor Air - Acrolein Non-Cancer Respiratory Risk+ (Hazard Quotient²)	2.4	2.1	1.1	1.7	2005 NATA
Outdoor Air - Chromium Non-Cancer Respiratory Risk (Hazard Quotient²)	0.0007	0.0007	0.0009	0.001	2005 NATA
Outdoor Air - Diesel PM Non-Cancer Respiratory Risk (Hazard Quotient²)	0.3	0.2	0.1	0.1	2005 NATA

Columns contain estimates for the ZIP code you entered, as well as county, state and national estimates.

The last column contains a link to the data source, where you can find more information about the data.

There are several sections of the table, which can be expanded or collapsed by clicking on the section heading or the small arrow beside it.

Each row is an environmental or demographic indicator.

Environmental Issue Profiles

How to Access the Environmental Issue Profiles from the C-FERST Home page

1) Go to **Gather Information about Your Environment.** This page contains a description and examples, followed by a button to **"Get Started: Generate Issue Profile."**

2) Returning users can click the **Issue Profiles** link in the Quick Links box on the side of the home page

Basic Features of an Environmental Issue Profile

Once you have reached the Environmental Issue Profile page, you can enter your ZIP Code or County and State, select issues, and generate an Issue Profile:

Callout annotations on the screenshot:

The Environmental Issue Profiles can be saved as a PDF file using links at the top and bottom of the page.

Click this link for a description of information found in each section of an Issue Profile.

Sections of the Environmental Issue Profile Include:
- General Information
- Exposure and Risk Reduction
- Sources
- Environmental Concentrations*
- Exposures*
- Health Risks*
- Strategies Implemented by other Communities

*including data and pie charts when available for hazardous outdoor air pollutants.

Methods for Measuring Local Environmental Conditions

How to Access Methods for Measuring Local Environmental Conditions from the C-FERST Home page

1) Go to **Gather Information about Your Environment.** This page contains a description and examples. The second example is followed by a button to **"Get Started: Collect Environmental Measurements."**

2) Experienced users can click the Environmental Measurements link in the Quicklinks box on the side of the home page
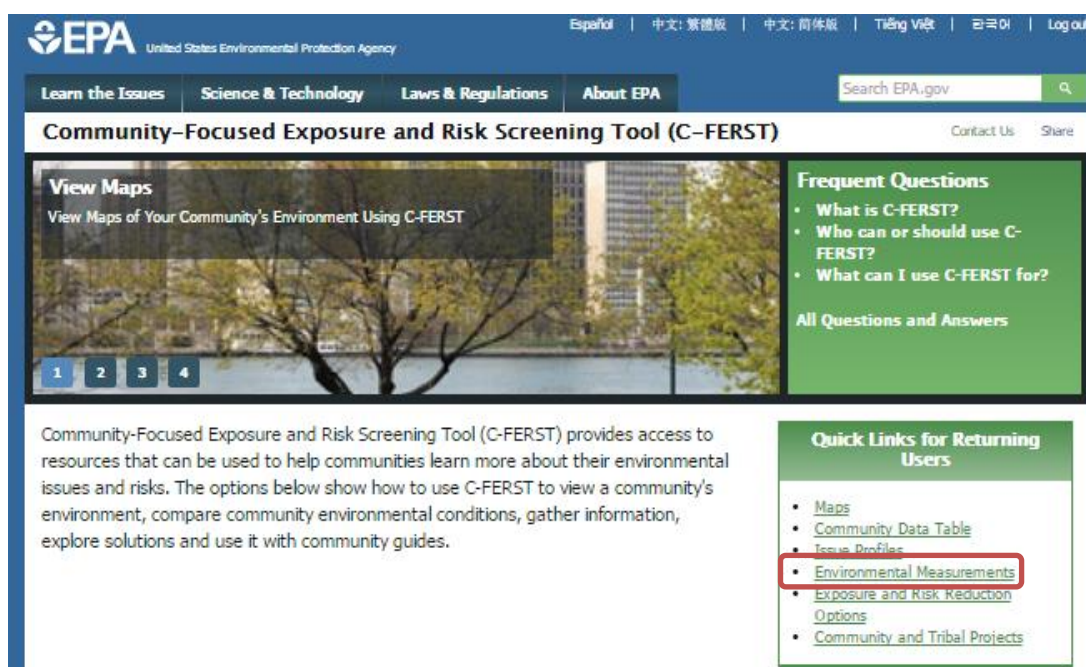
Basic Features of the Methods for Measuring Local Environmental Conditions page
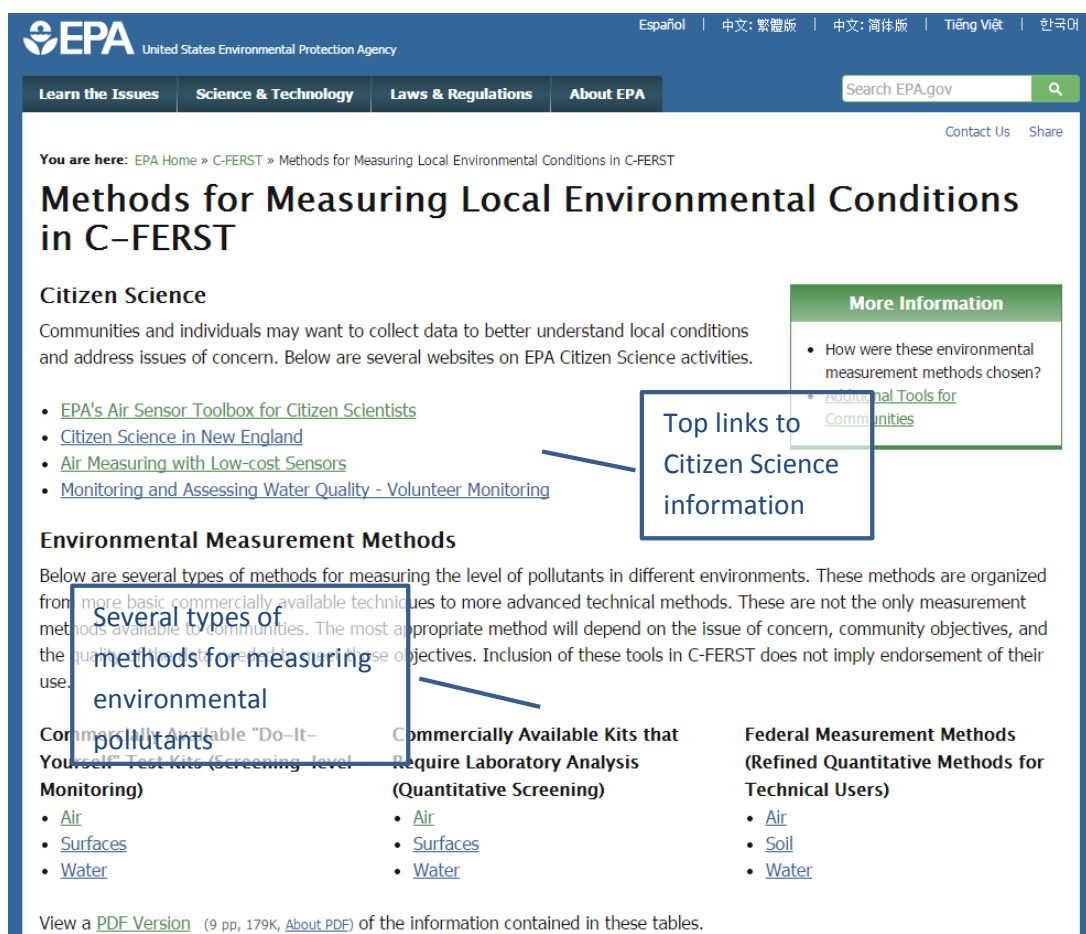
Exposure and Risk Reduction Options

How to Access Exposure and Risk Reduction Options from the C-FERST Home page

1) Go to **Explore Potential Solutions and Community Projects. This page includes** a description and example, followed by a button to **"Get Started: Explore Risk Reduction Options."**
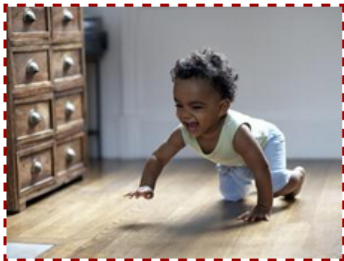
2) Returning users can click the Exposure and Risk Reduction Options link in the Quick Links box on the side of the home page

Basic Features of the Exposure and Risk Reduction Actions page

Community and Tribal Projects

How to Access Community and Tribal Projects from the C-FERST Home page

1) Go to **Explore Potential Solutions and Community Projects.** This page includes a description and example, followed by a button to **"Get Started: Explore Community and Tribal Projects."**

2) Returning users can click the Community Strategies link in the Quick Links box on the side of the page

Basic Features of the Community and Tribal Projects page

Community Guides

How to Access Community Guides from the C-FERST Home page

Click the **Community Guides** link on the Home page, then click one of the guides.

Basic Features of the Community Guides

Using the CARE Roadmap as an example:

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EPA

United States
Environmental Protection
Agency