

# ATSDR and Brownfields/Land Reuse Health Initiative



Webinar: Improving Community Health  
through Land Reuse and Development  
November 8, 2012  
2:00 – 3:00 EST

*To hear audio you MUST  
call into the number listed  
below:*

(877) 820-7831

Passcode: 569858

The findings and conclusions in this report have not been formally disseminated by the Agency for Toxic Substances and Disease Registry and should not be construed to represent any agency determination or policy.



U.S. Department of Health and Human Services  
Agency for Toxic Substances and Disease Registry

# Today's Speakers

## Laurel Berman, PhD

**ATSDR** National Brownfields Coordinator



## Leann Bing

**ATSDR** Regional Representative, Region 4



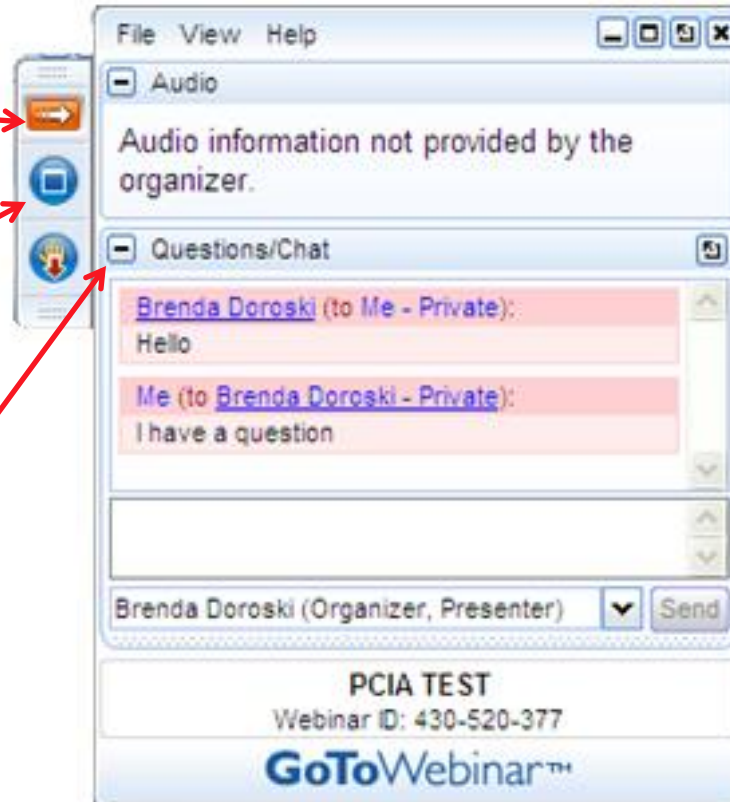
*To hear audio you **MUST** call  
into the number listed below:  
(877) 820-7831  
Passcode: 569858*

# Using the Webinar Technology

Hide Control  
Toolbar

Maximize  
Presentation

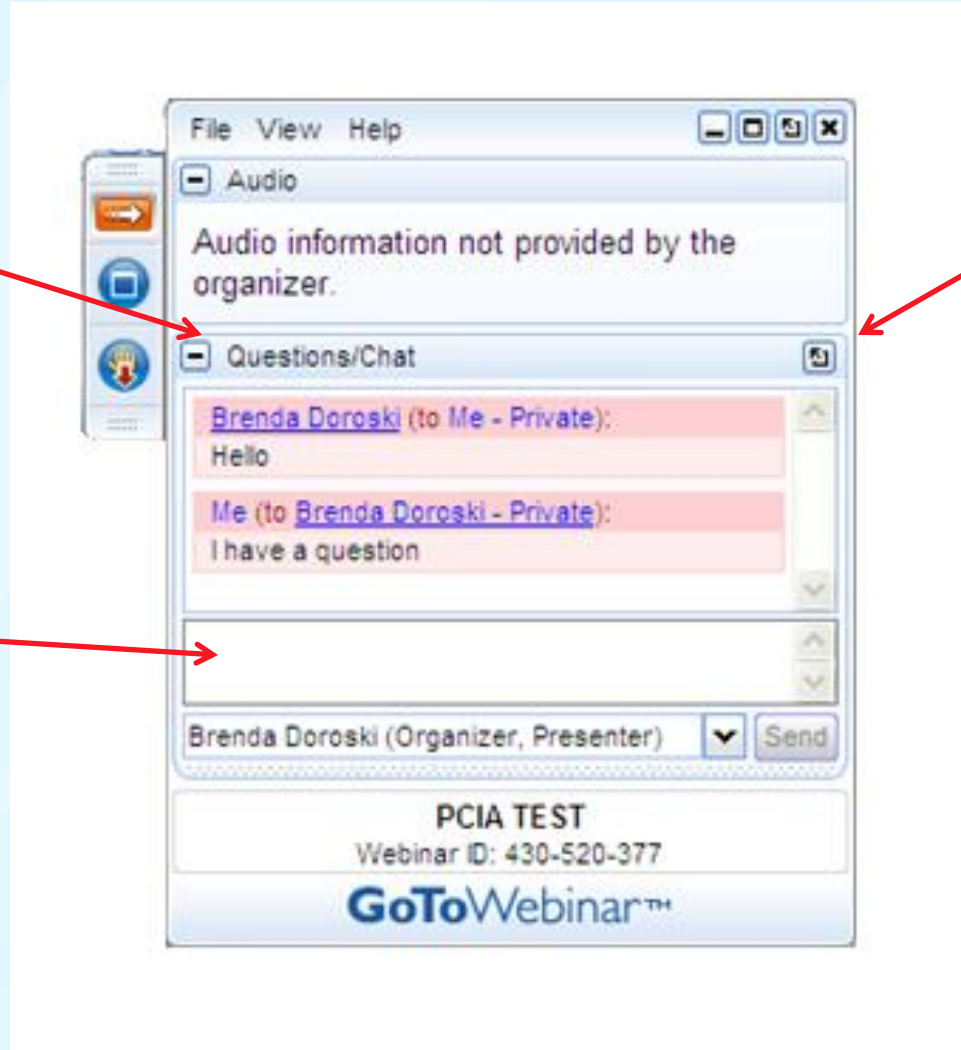
Question/Chat  
Feature



# Using the Webinar Technology

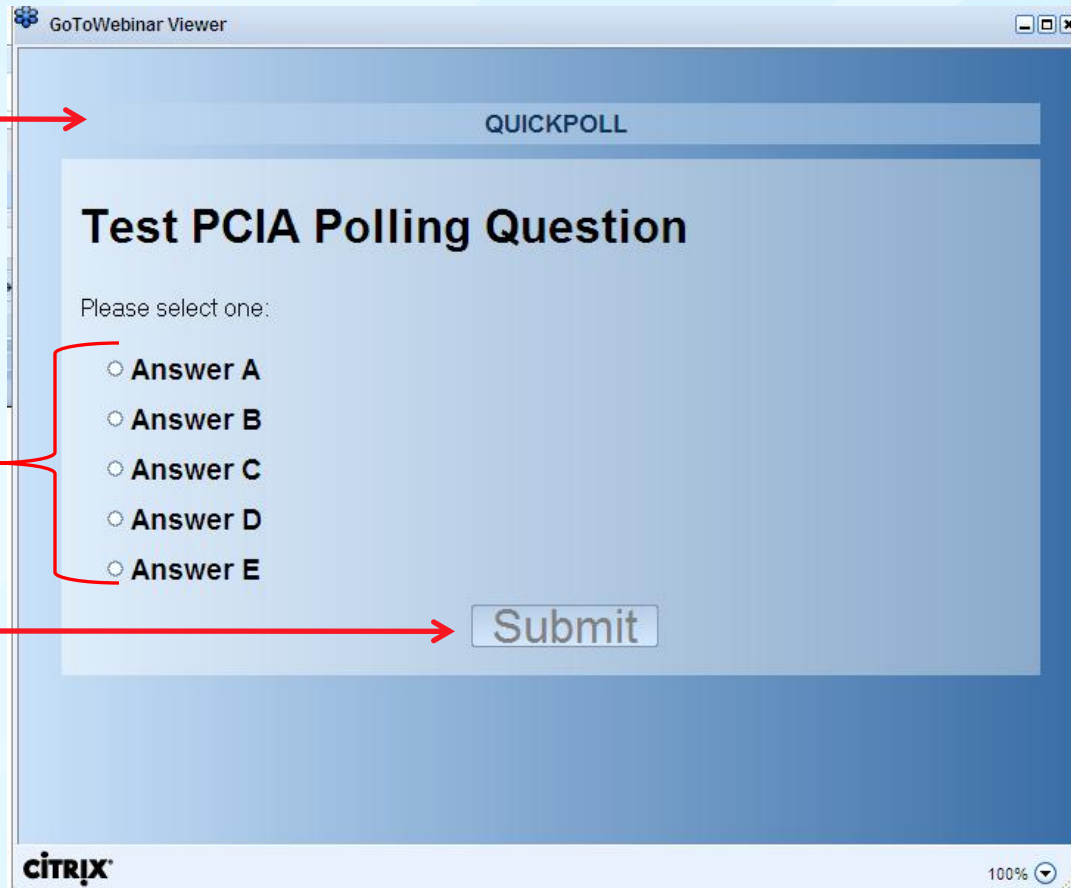
Maximize or Minimize

Type your question here, then click send



Pop-Out Feature

# Using the Webinar Polling Technology



The screenshot shows a window titled "GoToWebinar Viewer" with a "QUICKPOLL" section. The poll question is "Test PCIA Polling Question". Below the question, it says "Please select one:" followed by five radio button options: "Answer A", "Answer B", "Answer C", "Answer D", and "Answer E". A "Submit" button is located at the bottom right of the poll area. The Citrix logo and a 100% zoom level are visible at the bottom of the window.

The question will be listed here

Select one answer, then click "submit"

# Webinar Purpose

- ❑ Review brownfields/land reuse landscape and public health's important role in redevelopment
- ❑ Highlight the range of **free** ATSDR resources to meet your redevelopment needs
- ❑ Showcase community projects that are improving health
- ❑ Describe actions you can take to improve the health of your community



# Agenda

- ❑ Overview: ATSDR  
Brownfields/Land Reuse Initiative
- ❑ Role of public health in redevelopment projects
- ❑ ATSDR's approach to sites
  - Promote the 10% Health Award
  - Provide free tools and resources
  - Showcase models of success
  - Support community health pilots
  - Change policy
- ❑ Next steps: Actions you can take in your community
- ❑ Interactive Q&A



# Questions to Consider

- ❑ What did I hear about ATSDR's Initiative that I want to learn more about?
- ❑ What tools and resources am I already using in my redevelopment efforts?
  - What tools and resources did I hear about that can help me do even more?
- ❑ How could I engage my regional ATSDR representative to increase public health considerations in my projects?
- ❑ What 2-3 steps will I take as a result of this webinar?



# **Polling Question 1:**

## **How familiar are you with ATSDR's initiative?**

- A. Very familiar. I use their tools in all my projects.
- B. Somewhat familiar. I know what they offer and we use some of their tools.
- C. Not very familiar. I know about the initiative, but we don't use their resources.
- D. Unfamiliar. This is my first introduction to ATSDR's initiative.
- E. Not applicable.

## **Polling Question 2:**

### **How important is public health in your project?**

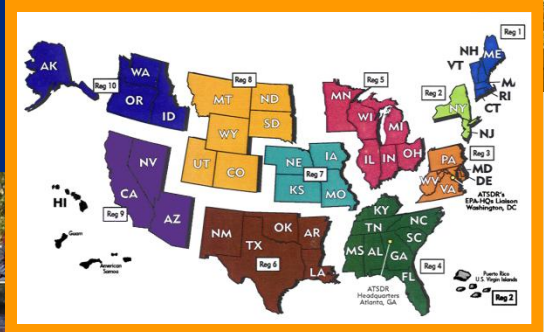
- A. Very Important. It's a critical component of every project.
- B. Important. We try and always at least consider public health.
- C. Not Very Important. We know it's important, but we don't have the time/resources/interest to address it.
- D. Unimportant. We rely on someone else to address health considerations.
- E. Not Applicable.



U.S. Environmental Protection Agency  
Emergency Response Command P



*ATSDR is  
engaged on the front lines  
protecting public health one  
community at a time!*



# What does ATSDR do?

ATSDR helps people understand how a brownfield/land reuse site can affect the health of their community.

## Goals of the initiative

- Encourage communities to include and promote community health in brownfield and land reuse projects.
- Protect community members' health when redeveloping brownfields and land reuse sites.

# Your Community Health Partner

## Contact ATSDR for:

- Free tools and training
- Examples of successful community projects
- Specialists that can help you locate and understand existing community health data
- Committed, knowledgeable staff

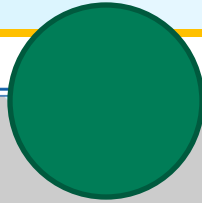
[www.atsdr.landreuse@cdc.gov](mailto:www.atsdr.landreuse@cdc.gov)

# Successful Results

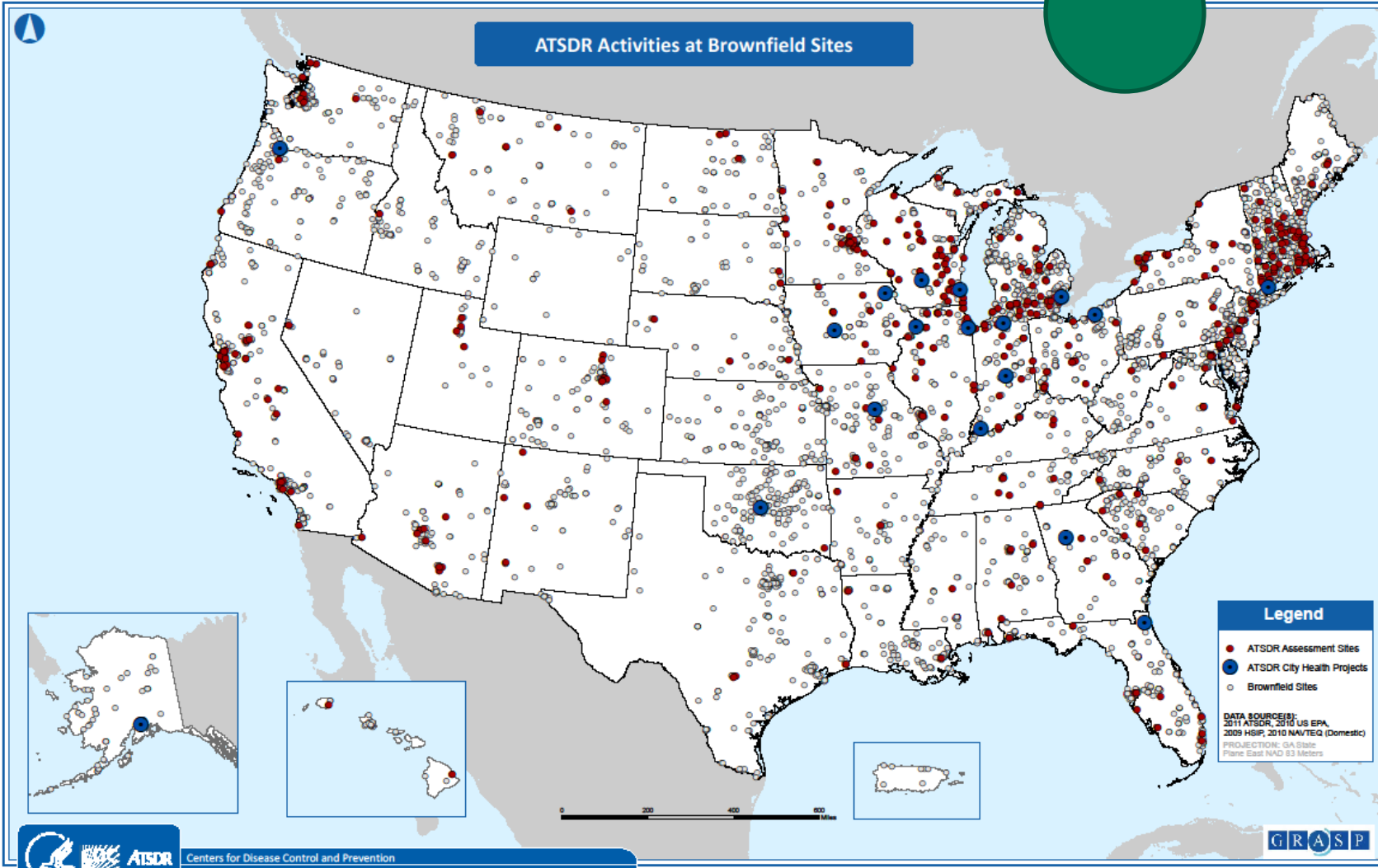
## Communities have seen:

- Increased access to community health center services.
- Increased community activities to promote healthy lifestyles (like community gardens and parks).
- Decreased crime rates and safer neighborhoods.
- Increased economic opportunities, property values, adult education.

# **Why health agency involvement?**



### ATSDR Activities at Brownfield Sites



Centers for Disease Control and Prevention  
Agency for Toxic Substances and Disease Registry



Geospatial Research, Analysis & Services Program



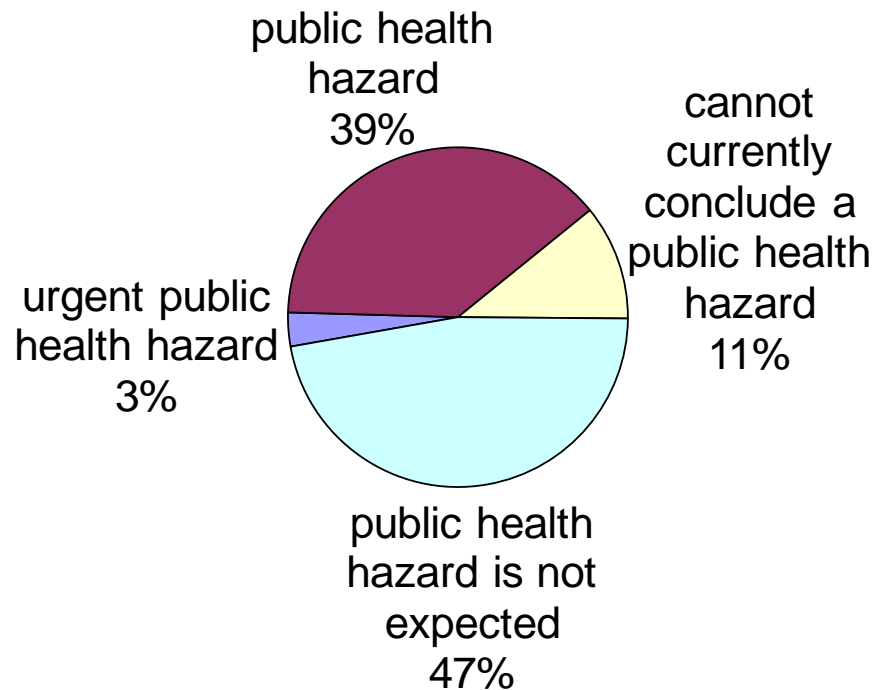
## **Polling Question 3:**

**Do you coordinate with your local health agency on redevelopment projects?**

- A. Yes
- B. No
- C. Not Sure
- D. Not Applicable

**What is the role of public health  
in redevelopment projects?**

# Health Conclusion Categories for Brownfield /Land Reuse Sites



# Contaminated sites were and are being reused without careful assessment



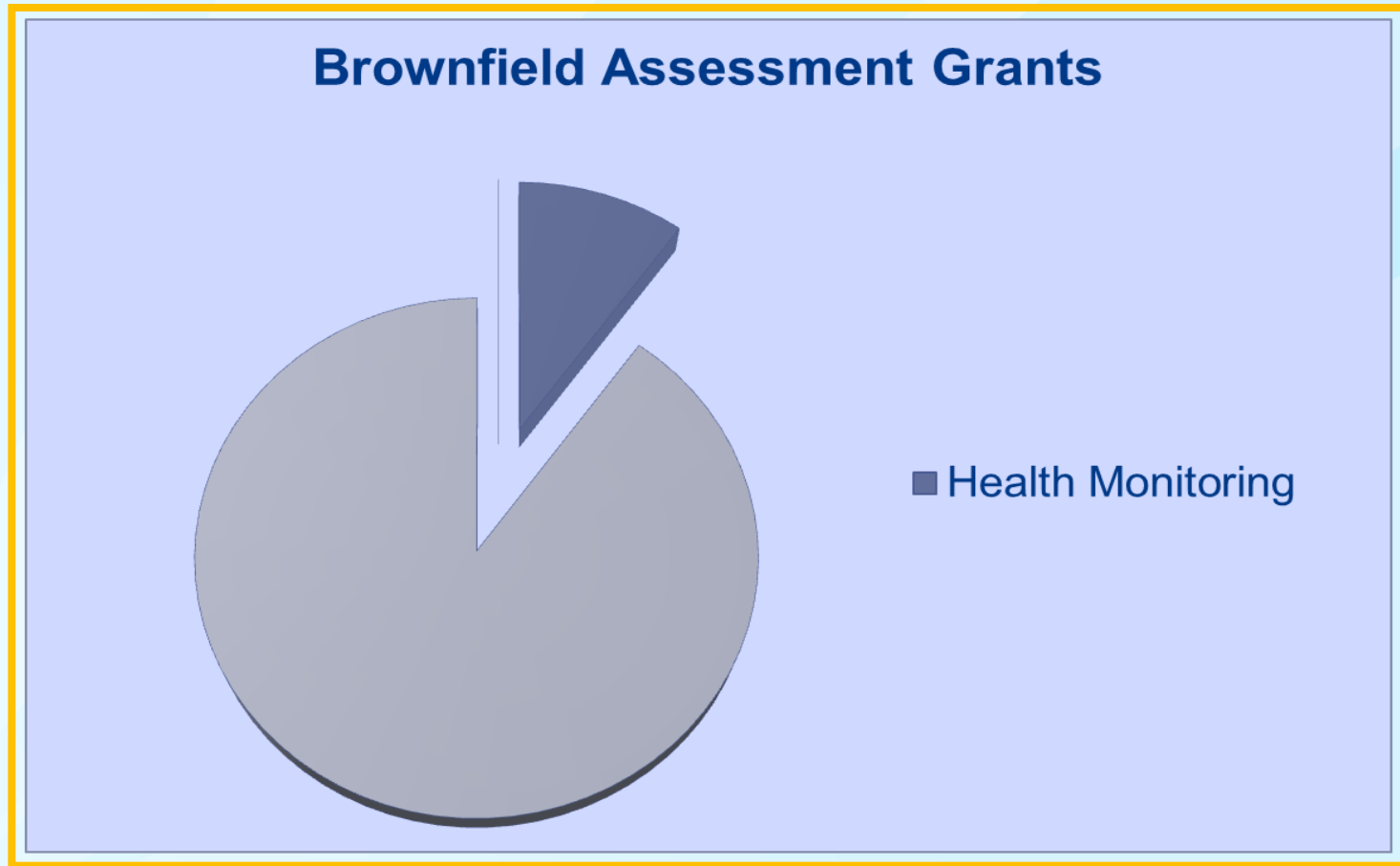
# Our Approach to BFLR Sites

1. Promote 10% Health Award
2. Provide free tools and resources
3. Showcase models of success
4. Support community health pilots
5. Inform policy makers
6. Promote action (Next steps)

# Going Beyond Traditional ATSDR Work

1. **Promote 10% Health Award**
2. Provide free tools and resources
3. Showcase models of success
4. Support community health pilots
5. Inform policy makers
6. Promote action (Next steps)

# 10% Health Monitoring in Brownfields Assessment Grants



## **Polling Question 4:**

**Do the projects you support take advantage of the 10% Health Monitoring Award?**

- A. Yes
- B. No
- C. Not Sure
- D. Not Applicable



# Going Beyond Traditional ATSDR Work

1. Promote 10% Health Award
2. **Provide free tools and resources**
3. Showcase models of success
4. Support community health pilots
5. Inform policy makers
6. Promote action (Next steps)

# ATSDR Action Model

Step 1: What are the issues in the community?



Step 2: How can development address these issues?



Step 3: What are the corresponding community health benefits?





Step 4: What data are needed to measure change?

# ATSDR Brownfields/Land Reuse Site Tool

Evaluation Draft Brownfields/Land-Reuse Site Tool

## Evaluation Draft Brownfields/Land-Reuse Site Tool



Enter, View, Query, or Print Site Data  
 Import inventory data  
 Exit      Evaluation DRAFT: 23Mar2010

Evaluation Draft Brownfields/Land-Reuse Site Tool - Data Entry Form

Close Save Scenario Name: test ID: \_\_\_\_\_

Info Type **Data** Involvement Future Use Proximity Chems Concerns Hazards Exposures Attach Log Site Visit

Data From Various Media

- Air
- Biota
- Soil
- Well Data
- Vapor Intrusion (soil gas)
- Food data
- Sediment data
- Product Container

Reports Available

- City Historical Reports
- Emergency Response
- Phase One Environmental Site Assessment
- Phase Two (sampling data) Environmental Site Assessment
- Removal Action Memo
- Pollution Report (POLREP)

- Contains Linked Air Data
- Contains Linked Soil Data
- Contains Linked Water Data
- Contains Linked Fish Data

Data Available (other):

**Perlman, GD; Berman, L, Bing, K. (2012).** ATSDR Brownfields/Land Reuse Site Tool. *Journal of Environmental Health*, 75(5), 30-34.

Expected release: mid-November 2012.

# ATSDR Brownfields/Land Reuse Site Tool Multiple Dose Calculator

**Evaluation Draft - Data Conversion Tool**

1) Import Lab Data    2) Export Data    3) Close    15 July 2008

Sample IDs to Exclude    Analysis Codes to Include    Field Mapping    CASN Issues

Select Sample ID field

List of ID number: [ ]    IDs to exclude: [ ]

- LOCATION\_DESCRIPTION
- SURVEY\_NAME
- PROJECT\_NUMBER
- SAMPLE\_NUMBER
- STATION\_ID
- SAMPLE\_ID**
- ANALYSIS\_NAME
- ANALYSIS\_CODE

**Evaluation Draft Brownfields/Land Reuse Site Tool**

Import and Process Data    Cancel

Start Here    Air    Soil Ingestion    **Soil Dermal**    Soil gen params    Water Ingestion    Water Dermal    Water gen params    Fish

A = Total Soil Adhered (mg) = Exposed Skin Area x Soil Adherence Conc'n:

Head     Torso     Arms     Hands     Legs     Feet

A = Exposed Skin Area: 9.10E+03 x Soil Adherence Concentration 0.2

A = 1.82E+03

Total Surface Area (SA) (cm2): 15235

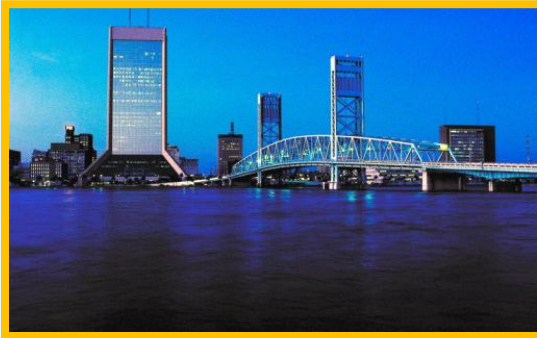
- Head (% of total SA) 9.30%
- Torso (% of total SA) 32.70%
- Arms (% of total SA) 12.43%
- Hands (% of total SA) 5.30%
- Legs (% of total SA) 32.53%
- Feet (% of total SA) 7.66%

*Air - Results based on the maximum values.*

Inv: 3.00E+01    ED\_yrs: 5.00E+00

Chemical	CAS#	Units	CV Name	CV Value	>CV	Max Value	U	HQD	# non-HQD>CV	Cancer risk
<i>Actual values above &gt; CV values</i>										
4,4-DDT	000050-29-3	ppb	C REO	7E+0	Y	4.1E+02	17	3	14	4.1E-02
Alpha-BHC	000019-86-6	ppb	C REO	5E+05	Y	2.4E+01	17	16	1	3.6E-02
Arsenic	00740-39-2	ppb	C REO	7E+05	Y	3.1E+01	16	0	16	2.9E-02
Beta-BHC	000019-85-7	ppb	C REO	2E+0	Y	2.4E+01	17	16	1	1.1E-02
Bis(2-Chloroethyl)ether	000111-44-4	ppb	C REO	3E+0	Y	6.7E+02	16	15	1	5.2E-02
Cadmium	00740-43-9	ppb	C REO	1E+0	Y	5.0E+00	16	15	1	3.0E-03
Cobalt	00740-48-4	ppb	Chronic MRL	4E+02	Y	4.5E+01	16	0	16	
Dieldrin	000030-57-1	ppb	C REO	1E+05	Y	3.2E+01	17	16	1	1.9E-01
Hexachlorobenzene	000118-74-1	ppb	C REO	2E+0	Y	1.2E+03	16	15	1	4.6E-01
Manganese	007439-95-5	ppb	Chronic MRL	2E+02	Y	3.0E+02	16	0	16	
Naphthalene	000081-20-3	ppb	Chronic MRL	7E+01	Y	1.3E+03	16	15	1	
Nickel	00740-02-0	ppb	Chronic MRL	4E+02	Y	2.6E+01	16	0	16	
Phenyd	000103-95-2	ppb	Acute MRL	2E+01	Y	5.1E+02	16	15	1	
Vanadium	00740-62-2	ppb	Acute MRL	1E+01	Y	5.9E+01	16	0	16	

# Brownfield /Land Reuse Community Health Videos



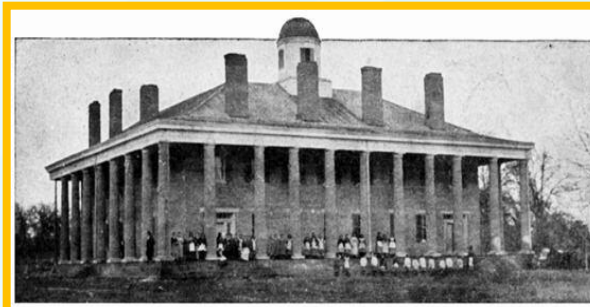
City of Jacksonville, Florida:  
Brownfields/Land  
Revitalization Program



Squim, Washington:  
Jamestown S'Kallam



Baraboo, Wisconsin:  
Baraboo Ringling Riverfront  
Redevelopment



Tahlequah, Oklahoma:  
Cherokee Nation



Postville, Iowa:  
Upper Explorerland  
Regional Planning Commission

# Environmental Health Education for Local Health Departments and Environmental Agencies

- Toxicology
- Risk communication
- Epidemiology
- GIS



## **Polling Question 5:**

**Which of these tools/resources have you used in your project? (Select all that apply)**

- A. Action model
- B. Site tool
- C. Dose calculator
- D. Community health videos
- E. *Leading Change* book
- F. Health education services

# Going Beyond Traditional ATSDR Work

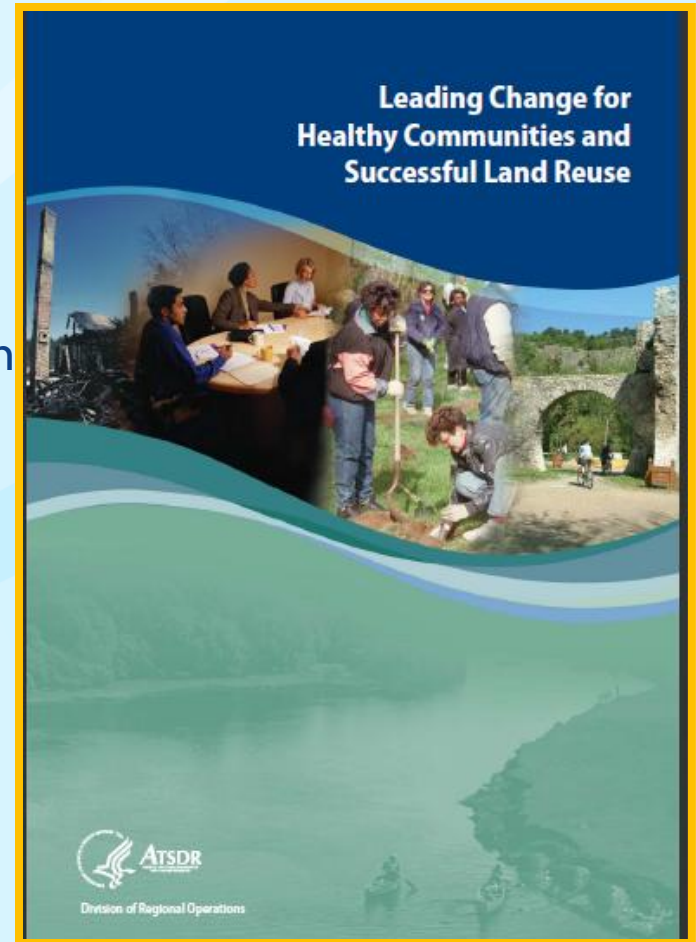
1. Promote 10% Health Award
2. Provide free tools and resources
3. **Showcase models of success**
4. Support community health pilots
5. Inform policy makers
6. Promote action (Next steps)



# Best Practices

## Community Health Guidebook

- The Brass Site, Kenosha, Wisconsin
- Clearwater Brownfields Area, Clearwater, Florida
- Five Mile Creek, Jefferson County, Alabama
- Highland Park, Milwaukee, Wisconsin
- Menomonee River Valley, Milwaukee, Wisconsin
- Treasure Valley Institute for Children's Arts, Boise, Idaho
- Yukon River Inter-Tribal Watershed Council, Alaska and Yukon
- Moore Square Museums Magnet School, Raleigh, North Carolina
- Keweenaw Bay Indian Community, L'Anse Indian Reservation, Michigan



# Going Beyond Traditional ATSDR Work

1. Promote 10% Health Award
2. Provide free tools and resources
3. Showcase models of success
4. **Support community health pilots**
5. Inform policy makers
6. Promote action (Next steps)

# Community Health Projects

- ❑ Bridgeport, CT
- ❑ Pleasantville, NJ
- ❑ Hudson/Mohawk River Corridor, NY
- ❑ Buffalo, NY
- ❑ Rochester Falls, NY
- ❑ Niagara Falls, NY
- ❑ Tallassee, AL
- ❑ Atlanta Brownfield Project, GA
- ❑ Tampa, FL
- ❑ Clearwater, FL
- ❑ Jacksonville, FL
- ❑ Baraboo, WI
- ❑ Detroit, MI
- ❑ Milwaukee, WI
- ❑ Rock County, WI
- ❑ Indianapolis, IN
- ❑ Cedar, MI
- ❑ Blue Island, IL
- ❑ East Cleveland, OH
- ❑ Cuyahoga County, OH
- ❑ City of Piqua, OH
- ❑ Central Corridor, MN
- ❑ Elkhart, IN
- ❑ Tribal Brownfields Video (4&6)
- ❑ Clinton, IA
- ❑ Upper Explorerland, IA
- ❑ Perry, IA
- ❑ Missouri Lead Mining
- ❑ Saipan UXO
- ❑ Tucson, AZ
- ❑ Lummi Nation, WA
- ❑ Linnton, OR
- ❑ Portland, OR
- ❑ Tribal Brownfields, AK
- ❑ Highway to Health and Healthcare

# Case Study: Baraboo, WI



The ATSDR Brownfields/Land Revitalization Action Model is a grassroots, community level model designed to foster dialogue, communication, and vision among the diverse members of the "Development Community".



# Going Beyond Traditional ATSDR Work

1. Promote 10% Health Award
2. Provide free tools and resources
3. Showcase models of success
4. Support community health pilots
- 5. Inform policy makers**
6. Promote action (Next steps)

# ATSDR and Partners Creating Change

- ❑ School siting guidelines
- ❑ Urban gardening and soil kitchens
- ❑ Day care siting
- ❑ Lead exposures
  - Curriculum and wells

# Going Beyond Traditional ATSDR Work

1. Promote 10% Health Award
2. Provide free tools and resources
3. Showcase models of success
4. Support community health pilots
5. Inform policy makers
6. **Promote action (Next steps)**

# Environmental Justice Detroit, MI





# Abandoned Gas Station to Neighborhood Police Station and Family Center



# From Dilapidated Housing to Neighborhood Renaissance



# Recreational Trail Expansion and Use

Before (ATSDR, 2008)



After (ATSDR, 2010)



# Land (Re)Use

From waste transfer facility to clover field



Continued remediation of a manufactured gas plant



# Promoting Action: Steering Committee

- Urban planning
- Food policy/systems
- Academics
- Public health
- Environmental regulation
- Community outreach
- Economic development
- Other

# Actions You Can Take

- ❑ Download ATSDR's free resources at [www.atsdr.cdc.gov/sites/brownfields](http://www.atsdr.cdc.gov/sites/brownfields)
- ❑ Contact your regional ATSDR representative to learn more
  - ❑ [atsdr.landreuse@cdc.gov](mailto:atsdr.landreuse@cdc.gov) for information
- ❑ Engage your state or local health department in the planning process
- ❑ Adopt the ATSDR Action Model for your project

**Polling Question 6:**  
**As a result of this webinar, I plan to...**  
**(Select all that apply)**

- A. Download and use ATSDR's materials
- B. Contact my regional ATSDR representative
- C. Engage my state and/or local health department
- D. Adopt the ATSDR Action Model for my project(s)
- E. Other

# Questions and Answers

To ask a question, please type your question in the Questions/Chat pane on your webinar console.



# Contact Information

[www.atsdr.landreuse@cdc.gov](mailto:www.atsdr.landreuse@cdc.gov)

**Laurel Berman,**

National Brownfields Coordinator

**Office:** 312-886-7476

**Email:** [LABerman@cdc.gov](mailto:LABerman@cdc.gov)



**Leann Bing, Region 4**

**Office:** 404.562.1784

**Email:** [KBing@cdc.gov](mailto:KBing@cdc.gov)



**Gary Perlman, Region 1**

**Office:** 617-918-1492

**Email:** [Gap6@cdc.gov](mailto:Gap6@cdc.gov)



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or the Agency for Toxic Substances and Disease Registry

