

Public Health and Brownfields/Land Reuse

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What are brownfield and land reuse sites?

- Brownfield sites are defined as "abandoned, idled, or underused industrial and commercial properties where reuse or redevelopment is complicated by real or perceived contamination." These sites have received funding from EPA Brownfield Program.
- Land reuse sites are defined as "any sites formally utilized for commercial and industrial purposes complicated by real or perceived contamination" that have not received funding from the EPA Brownfield Program.
- There are approximately 450,000 brownfield sites in the U.S.



The Abandoned Lehigh Valley Electroplating Plant



Jenkins Wake Site

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Why is it important that ATSDR or a state, local or tribal public health entity be involved in brownfield and land reuse decisions?



- Environmental assessments may not address a community's concern about the health risks of residual contamination or institutional controls
- Public health issues have been identified at brownfields/ land reuse sites that need to be addressed in redevelopment
- Public health can be involved in planning healthy communities
- Public health departments are seen as a credible source of information for communities

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Steps To Redevelopment/Land Reuse



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Health Agency FAQs

- Why should we get involved?
- How do we get involved?
- Is funding available?
- What resources are out there to help us?

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Why Get Involved? Isn't It Just More Work?

- Often health departments get involved when a problem has already occurred, which can be costly in terms of personnel time as well as project development funding
- Act now and avoid paying later



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Why Get Involved?

- Health agencies can ask the right questions (and find the answers):
 - Who is exposed?
 - How close are the nearest populations? Daycare centers? Schools?
- Health agencies can think beyond the Phase 2 borders: contamination typically does not stop at the property line
- Health agencies can help bring a health focus into redevelopment
 - Achieve healthy communities
 - Can save development dollars by avoiding mistakes

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How Do We Get Involved?

- Assess what brownfields/land reuse activities you already perform
 - Risk communication/ public meetings?
 - Freedom of Information Act Requests for Phase I or 2 Environmental Site Assessments?
 - Site Assessment or data review?
- Contact recent EPA Brownfield grant recipients in your service area
 - www.epa.gov/brownfields - list of all grantees
 - Offer your services pro-actively vs. once a problem arises

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Is Funding Available?

- Health agencies may be eligible for brownfields funding
 - 2009 guidelines allowed "collaborative" applications (e.g., health department and city)
 - www.epa.gov/brownfields
- Funding from a Brownfields grantee
 - "Consulting" services, such as risk communication or data assessment
 - Health monitoring funding, such as Sauk County Health Department receiving Baraboo EPA Brownfields Assessment percentage (up to \$20,000 is typical for health monitoring)
- Other funding
 - www.grants.gov
 - ATSDR is funding seven State/local health agencies in brownfields/land reuse pilots
 - Additional funding may be available

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ATSDR Newly Funded Community Health Projects

Health Project	Project Purpose
Arizona-Flowing Wells Brownfield Project, Pima County	Identify public health impacts of current brownfield sites; community engagement in redevelopment; communication of health issues related to redevelopment to stakeholders.
Ohio-East Cleveland -Health and Development Committee	Incorporate HIA methodology into redevelopment plans; incorporate environmental justice efforts into community redevelopment.
Indiana-Elkhart County Health Department	Create a public information portal called "What's in my backyard?" to address health concerns regarding Brownfield redevelopment of two major sites for future residential use.
Georgia Dept. of Health- Atlanta Beltline Community Health (ABC Health)	Organize community assistance groups for brownfields undergoing redevelopment along the beltline. Provide technical support to these CAGS for health related issues in redevelopment.

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ATSDR Newly Funded Community Health Pilots

Iowa Dept. Of Health, Perry, Iowa	Develop educational outreach program for Hispanic community to relay health information about redevelopment of properties in Perry, Iowa and educate population on newly developed walking trails on redeveloped properties.
MN Dept. of Health/ City of St. Paul	Incorporate public health decisions into the redevelopment along a proposed rail line from St. Paul to Minneapolis and create a site inventory. Indicators of community change will be developed.
MO Dept. of Health/Statewide	Increase awareness of public health and environmental implications of redevelopment of formerly mined lead sites in MO by participating in Phase I assessment decisions; create model ordinance for local governments to incorporate public health in Brownfield redevelopment.

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What Resources are Available?

- ATSDR is developing tools to follow these steps:



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ATSDR Activities for Each Step

Steps in the Redevelopment Process	ATSDR Activity
1. Organize the development community	Community Guidebook (in preparation) Jacksonville, FL Development Community Video (completed)
2. Evaluate environmental and health issues	Site inventory tool (completed/tested) Health risk assessment tools for state health (completed/testing) Ongoing health assessment activities (continuous) Community based health projects (new projects)
3. Communicate risk to the developmental community	Health Education Guidebook (drafted) Health education projects (Saipan)
4. Redesign community with health in mind	Community four step model (pilot testing -30 th Street Corridor and Baraboo, WI; and Detroit, MI)
5. Measure environment and health change	To be determined

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Organize the Development Community

- The Development Community includes all parties who may have an interest in the redevelopment: health agencies, state and federal agencies, cities, developers, planners, community groups, community residents, others
 - Community Guidebook
 - Jacksonville, Florida video clips (completed)
- Health agencies are natural liaisons to the community

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Land Revitalization: Developing the Healthy Community (Community Guidebook)

- A comprehensive community toolkit
- Key "stakeholder" roles
- Best Practice examples of integrating health in redevelopment:
 - business, mixed use, residential, school, recreational, urban, rural, tribal, health care, green spacing
- Resources
 - Tools, funding



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Jacksonville, FL

- Advertising the successful of partnerships in Brownfield redevelopment
- Video messages include State Health Department role in redevelopment



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Evaluate Environmental and Health Issues

- What ATSDR has done
- What you can do
 - Data review
 - Brownfields/Land Reuse Site Inventory Tool (completed and ready for use)
 - Health Education Guidebook

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ATSDR Site Assessment Example



Third St. Tannery Before



Third St. Tannery After

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ATSDR Health Assessment Products

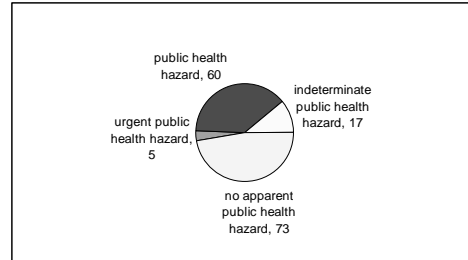
429 BF/LR sites assessed



Products	Number of documents
Health Advisories	2
Public Health Assessments	23
Health Consultations	217
Site Review and Updates	6
Exposure Investigations	4
ATSDR Record of Activity (AROs)	1151+

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ATSDR Health Conclusion Categories for Brownfield /Land Reuse Sites



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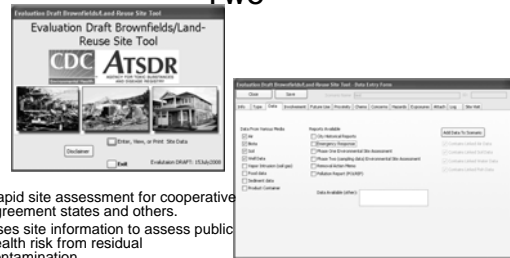
What You Can Do: Brownfields/Land Reuse Site Inventory Tool

- Intended for local health departments as a means to catalog data
- Allows local health to provide feedback to developers collecting information for Phase 1 and 2 Assessments
- Includes searchable database for information on former uses, health complaints, institutional controls, and site characteristics



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Land Reuse Site Inventory Tool Two

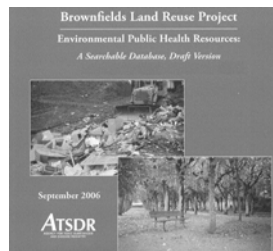


- Rapid site assessment for cooperative agreement states and others.
- Uses site information to assess public health risk from residual contamination.
- Can use with ATSDR's Integrated Dose Calculator.

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Compendium of ATSDR Brownfield/Land Reuse Assessment Products

- Searchable by contaminants, former site use, site location, and health determinations
- Gives examples of environmental health assessments



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Communicate Risk to the Development Community

- Example: Health Education Guidebook (in draft)
- Example: Saipan Unexploded Ordinance (UXO) health education

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Health Education

- Basics PLUS
- Modules include:
 - Brownfields and Hazardous Waste Sites
 - Risk Communication
 - Toxicology and Risk Assessment
 - Epidemiology
 - GIS and Brownfields/Land Reuse
- Geared to local health departments, with assistance from State

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Saipan Educational Materials

- Island specific Materials



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ATSDR Step 4 of the Cycle: Redesign the Community with Health In Mind

- Four Step Model: Brownfields/Land Revitalization Action Model
- Model was developed with assistance from stakeholders in Milwaukee 30th Street Corridor
- Community wanted faster way to identify public health issues
- Public health issue categories included:
 - Safety and security
 - Physical and mental health
 - Housing
 - Education
 - Economy
 - Environment
 - Risk communication and community outreach

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Key Components of the Action Model

- Form the Development Community
- Focus on overall health status of the community
 1. What are the existing health issues in the community?
 2. How can sustainable redevelopment address these health issues?
 3. What are the community health benefits of redevelopment?
 4. How can these health changes be measured?



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Applications of the Action Model

- Milwaukee, WI
- Baraboo, WI
- Kenosha, WI
- Detroit, MI
- Other

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Action Model Framework

Community/ Public Health Issue	Redevelopment Design Approach	Public Health Benefit	Measurement of Health Benefit

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Milwaukee's 30th Street Corridor Action Model

- A baseline community health assessment
- The Development Community represented a collaborative partnership: EPA, States, City, Local Health Department Communities



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Applying the Framework to 30th Street Corridor

Community issues identified that need to be addressed in redevelopment (as compared to Greater Milwaukee):

- Greater rates for asthma hospitalizations
- Greater infant mortality
- Greater percentage of elevated blood lead levels (BLL) in children
- Low infant birth rates
- 700 acres of abandoned lots
- Crime rates of violent crimes twice the rate of Milwaukee
- Lower rates of high school graduates
- Reading comprehension lower in 3rd grade students
- 80% residents health insured
- Lower employment rates
- Greater number living in poverty
- 437 acres of parks that are usable in the Corridor
- Greater number of contaminated properties
- 892 lots available for commercial use
- High rate of lead abatements in housing
- High number of new building permits
- Twice the number of vacant housing stocks than in Milwaukee



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The Baraboo Action Model

- Through Brownfields Health Monitoring initiative
- Sauk County Health Department received funding
- Environmental preservation
- Beyond the site contaminants/ health monitoring

Issues	Redev Approach	Health Ben	Meas
River Preservation	Access water quality data	Ecosystem improvements, reduced exposures	Water Quality parameters
Potential for lead and asbestos exposures	Assessment of housing stock	Reduced exposures	Inventory (SCHD)
Communication and risk comm	Increased partnership b/w SCHD and City	Build comm trust	# of events and activities

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Questions?

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