# **ATSDR Action Model**

# Who Are We?

Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency headquartered in Atlanta, Georgia. ATSDR is responsible for evaluating and protecting community health from the effects of exposure to hazardous substances in the environment.

### How does ATSDR define the Development Community? The

Development Community includes residents, planners, city agencies, health departments, developers, and any other stakeholders in the community of redevelopment.

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.

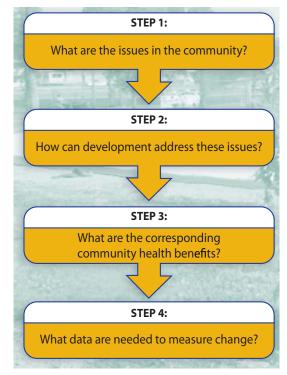
Land Reuse sites are defined as "any site formally utilized for commercial and industrial purposes complicated by real or perceived contamination" that has not received funding from the EPA Brownfield Program. The ATSDR Brownfields/Land Revitalization Action Model (ATSDR Action Model) is a grassroots, community-level model designed to foster dialogue, communication, and vision among the diverse members of the "Development Community".



The ATSDR Action Model creates a framework to assess the impacts of redevelopment on public health, with a goal of achieving positive, sustainable improvements in overall community health.

The Action Model framework encourages the Development Community to focus on broad public health topics connected to community health, such as physical and mental health; environment; education and economy; planning; safety and security; and communication and risk communication.

## The Action Model is built around four steps or questions:



Through brainstorming, answering these four questions creates a framework for incorporating positive and sustainable public health endpoints in redevelopment plans.



Agency for Toxic Substances and Disease Registry Division of Community Health Investigations

# An example of the Action Model:

	STEP 1	STEP 2	STEP 3	STEP 4
Category	What are the community issues?	How can redevelopment address the issues?	What are the community health benefits?	What data are needed to measure change?
Health	Exposure to harmful sub- stances in the environment, such as those at brownfields sites or in old housing stock, is one of many risk factors for several diseases and adverse health effects of concern (e.g., asthma).	Environmental cleanups at brownfields sites may reduce risk of exposure to certain harmful substances. In addi- tion, renovation of old housing stock and construction of newer homes may help further reduce exposures to harmful substances.	Reduced blood lead levels, reduction of learning disabili- ties in children, fewer hospi- talizations for asthma, fewer infant deaths, and fewer low birth weight infants	Hospitalizations for asthma Infant mortality rates Lead and copper in tap water Lead poisoning in children (blood lead levels) Low birth weight
Community	Elevated crime rates are detrimental to the overall health and well-being of the community.	Development of abandoned sites, vacant lots, and vacant buildings may reduce areas where certain crimes occur and create a better sense of community among local residents.	Reduced crime-related injury and death. Reduced fear of crime, likely resulting in increased mobility of local residents.	Acreage of vacant lots Violent crime rates
	Due to lower educational at- tainment levels, local residents may not be competitive in the labor force and thus not receive the benefits from full- time employment.	Improvements at existing educational facilities and development of new educational centers (e.g., vocational schools, community centers) may promote the education- al development of youth in the community.	Increased educational attainment, employability, health insurance coverage, and understanding of health topics and information	Education of adults Third grade reading comprehension
	A lack of jobs is contributing to a high poverty rate, leaving residents with limited re- sources to access medical care and improve the residential infrastructure.	Whether through renovating abandoned or deserted buildings or constructing new ones, redevelopment activities designed to attract business can bring jobs into the community.	Lower unemployment rates and poverty may increase health insurance cover- age. People may be able to afford better nutrition and housing, and crime rates may decrease.	Percentage of adults with health Benefits Percentage of people employed Percentage of people living in Povert
Land and Environment	Opportunities for physical activity are limited, in part, by a lack of usable parks and "green space."	Providing recreational facilities (e.g., basketball courts) at parks and converting vacant lots into "green space" may increase physical activity and strengthen the sense of community.	Increased physical activ- ity, decreased likelihood of disease and health problems related to a sedentary lifestyle.	Acreage of parks People using parks
	Community members may be exposed to physical and environmental hazards when brownfields sites are not cleaned up	Clean-up activities at brownfields sites and other sites with contaminated land will reduce harmful exposures in the community.	Reduced disease and injury as a result of harmful expo- sures. Increased opportunity for redevelopment.	Contaminated land
Buildings and Infrastructure	Vacant and poorly maintained buildings can expose residents to health hazards and increase the perception of blight in the community.	Redeveloping commercial buildings can create new jobs, and new or renovated housing units can reduce expo- sures to harmful environmental contaminants (e.g., lead) and improve residents' quality of life.	Decreased exposure to environmental contaminants, and decreased childhood blood lead levels. Reduction in crime, and increase in employment.	Commercial properties Number of lead abatements Number of new construction permits Residential properties

The Action Model has been used in community health pilots in cities across the nation.

Milwaukee, WI, 30th Street Corridor

East Cleveland, OH, Cuyahoga County

Detroit, MI, 48217 Approach

Blue Island, IL, Cargo- and Transit-Oriented Development Community Health Monitoring

## Linnton, OR, Linnton Action Model Project

Baraboo, WI, Ringling Riverfront Development

St. Paul-Minneapolis, MN, Healthy Communities Count! Healthy Communities and the Central Corridor

Light Rail Transit Line

Your Community?

### To learn more about the ATSDR Action Model:

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