

EHLR Introduction Module

Laurel:

Welcome to the Environmental Health and Land Reuse, or EHLR, Training Introduction. I am Laurel.

The objectives of this introduction module are: Define land reuse and brownfields sites, Describe the 5-step Land Reuse Model, Identify two impacts of land reuse sites on community health.

The EHLR training is based on the roles and work of many ATSDR staff and their partners. Let me introduce the team behind the training. We have Zheng (or Jane) Li, Dawnovise Fowler, me, Laurel Berman, Venus Malloy, Terrell Perry, Unwanaobong Udoko, Shereitte Stokes, Kai Elgethun, and partner Simone Charles.

In this introduction module and the corresponding 5 modules of the EHLR training, we are represented by software voice-overs to deliver our EHLR training.

ATSDR's Land Reuse program uses the 5-step Land Reuse Model, which is the basis of the EHLR Training.

ATSDR promotes safe land reuse to reduce potential exposures to chemicals associated with land reuse sites and to improve community health.

The 5-step model steps correspond to our five content modules: 1. Engaging with Your Community; 2. Evaluating Environmental and Health Risks; 3. Communicating Risks to the Community; 4. Redesigning with Health in Mind; 5. Measuring Success.

The supplemental course textbook is Land Reuse and Redevelopment: Creating Healthy Communities. This book provides guidance and resources corresponding to each step of the 5-step Land Reuse Model. It is posted with your training materials.

You can access the EHLR training and the textbook at: <https://www.atsdr.cdc.gov/land-reuse-health-program/php/classroom-training/>.

Brownfields and Land Reuse Sites

Land Reuse Sites refer to the universe of blighted or potentially contaminated sites. These include Superfund sites, landfills, old mining properties, vacant properties, and other sites that may be redeveloped.

Brownfield sites are former commercial, industrial, or residential properties that may be contaminated. Properties may be vacant or underused. Examples include potentially contaminated old gas stations, old schools, and old factories.

There are over 450 thousand brownfields in the United States. However, there are also 10 million vacant properties, which could make the brownfields estimate much higher.

Using the estimate of 450 thousand brownfields, these sites are about 60 times more prevalent than other types of land reuse sites.

In the United States, brownfields are everywhere.

The map on the slide shows outlined gray circles across the country.

These are sites that have received U.S. Environmental Protection Agency, or EPA, funding, primarily for site assessment. The green squares show locations where ATSDR has completed a soil screening event called a soilSHOP. The red solid circles show locations where ATSDR has completed a health assessment on a brownfields site. The solid grey circles indicate where ATSDR has provided technical assistance on brownfields sites. The solid blue triangles indicate where ATSDR has funded or provided technical assistance on a brownfields community health project.

Why do We Engage Communities in Land Reuse?

Because they are concerned about environmental and community issues associated with blight and contamination.

Community needs traditionally have not always been in the forefront in real estate or economic development. With land reuse, we consider community needs up front in redevelopment plans as part of the goal to improve overall health.

The image at the right side of the slide shows typical brownfields, which in these cases are vacant, deteriorated, and boarded buildings.

As land reuse sites increase, environmental and health issues increase. People who live among multiple brownfields have many concerns about their communities' overall health.

The image on the left of the slide shows people in a public meeting about land reuse. The image on the right of the slide shows an abandoned building next to a small restaurant.

Brownfields areas have a higher percentage of environmental degradation.

The image on the left shows a petroleum tank that leaked into the ground. The contamination traveled through the soil pores and ended up across the road in a multi-unit residential housing area. There were young children living there.

The image on the right shows a former industrial facility that has known polychlorinated biphenyl contamination. The site was not fenced on all sides, and there were nearby residences. Kids had accessed the site and sprayed paint on the walls, possibly bringing them into contact with contamination. Sites like this can inadvertently expose kids and trespassers to harmful chemicals and physical hazards. These sites can also lower property values.

Communities with land reuse sites may have poorer air quality.

The image on the slide shows children boarding a school bus in the shadow of a large petroleum refinery. There is a residential neighborhood with many houses abutting the refinery.

Communities with multiple land reuse sites may have limited or poor options for recreation.

The image on the slide shows a very nice, new playground. However, brownfields in the area (such as the petroleum refinery in the background) might detract from health benefits of the playground.

Land reuse sites can lead to poor housing quality.

When communities have blighted properties and other land reuse sites, property values can go down. As a result, people might abandon or not maintain their properties.

The image on the slide shows a vacant and deteriorated house. Houses in this community are known to have lead-based paint and asbestos-containing materials. Leaving these properties in disrepair may lead to someone being exposed to contamination.

Communities with multiple land reuse sites may experience impacts at many levels.

They may have impacts on life expectancy, property values, and investment. They may have poor health in general—physical, mental, and economic health.

They may have impacts on blood lead levels, cancer rates, chronic disease, poverty, crime, pollution, environmental burden, and health issues.

What does change look like in engaged communities?

The images on the slide show changes in the city of Kenosha, Wisconsin. A former brass foundry changed from a hazardous waste site to a revitalized neighborhood.

The Kenosha Mayor held community meetings for at least two years to ensure community residents and organizations were engaged in redevelopment of the brass foundry site. Community members fully supported the redevelopment, but they wanted to avoid displacing the original population. They wanted to help residents become homeowners and to avoid higher taxes as property values rose. The community wanted access to healthy foods, housing, and education.

Within five years, there were new homes, increased home ownership, training for new homeowners, a middle school, and a full-service grocery store. At the same time, crime calls were cut in half and property values increased 30-50%. The original population was maintained, without increasing taxes.

Documenting change in Clearwater, Florida.

The image on the left is a screenshot from the Willa Carson Health and Wellness Center in Clearwater, Florida. This health center was part of a healthfields revitalization community project. Healthfields are the safe reuse of land to reduce harmful chemical exposures and to improve overall health.

In the late 1990s, registered nurse Willa Carson was providing medical care to her Clearwater community in two old apartments. By partnering with an environmental professional and community members, Carson helped to create a new clinic, a community center, a police station, and upgraded housing. The clinic provided free medical care to over 50,000 uninsured residents who previously did not have easy access to medical care.

Thank you.

You may now proceed to any or all of the 5 EHLR modules. These modules are in the CDC Train Learning Management System. The supplemental course textbook, Land Reuse and Redevelopment: Creating Healthy Communities, is posted with the course modules.

If you would like more information, you can email atsdr.landreuse@cdc.gov.