

# Considering Health in Communities with Brownfield Challenges

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# What is “health?”

Health is...

...a dynamic state of complete physical, mental, spiritual, and social well-being and not merely the absence of disease or infirmity.\*

Public health is  
...

“What we as a society do collectively to assure the conditions in which people can be healthy.”\*\*

Sources: \*World Health Organization (WHO), 1998;

\*\* Institute of Medicine (IOM), 1988

# What does medicine do?

Saves lives one at a time



# What does public health do?

Saves lives millions at a  
time





# What can 'health' look like in a community after ...

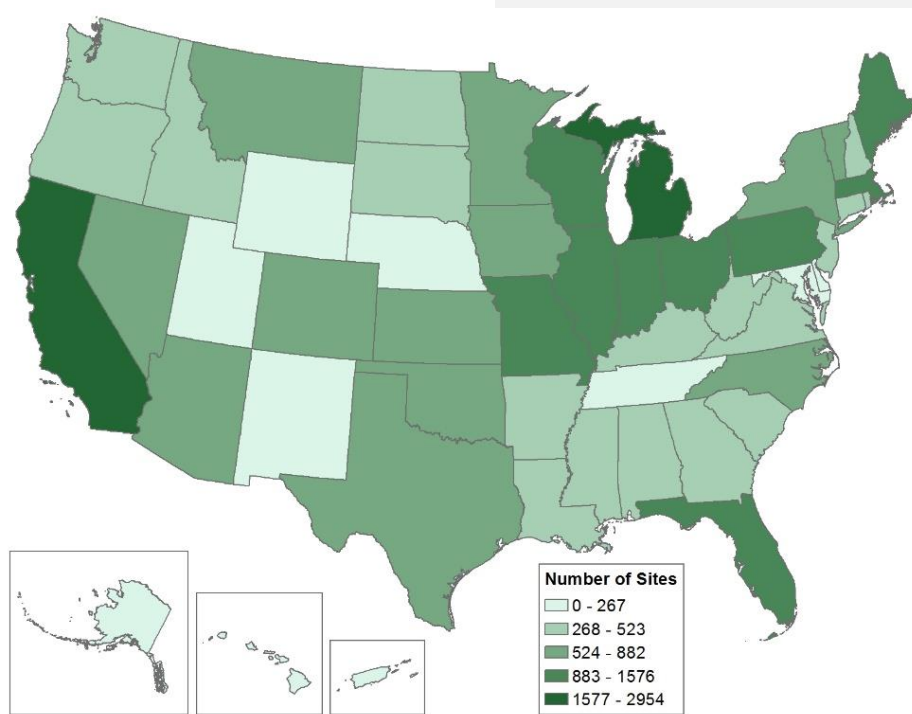
- Deindustrialization
  - Loss of jobs and population
  - Loss of way of life
  - Left with potentially contaminated sites
- Disinvestment
  - Loss of local tax base
  - Decline in infrastructure
- Abandonment
  - Economic erosion
  - Physical decline
  - Social isolation



# Population near Brownfield Sites

**149 million people**, or **45%** of U.S. population, including **46% of children** under age 5, live within...

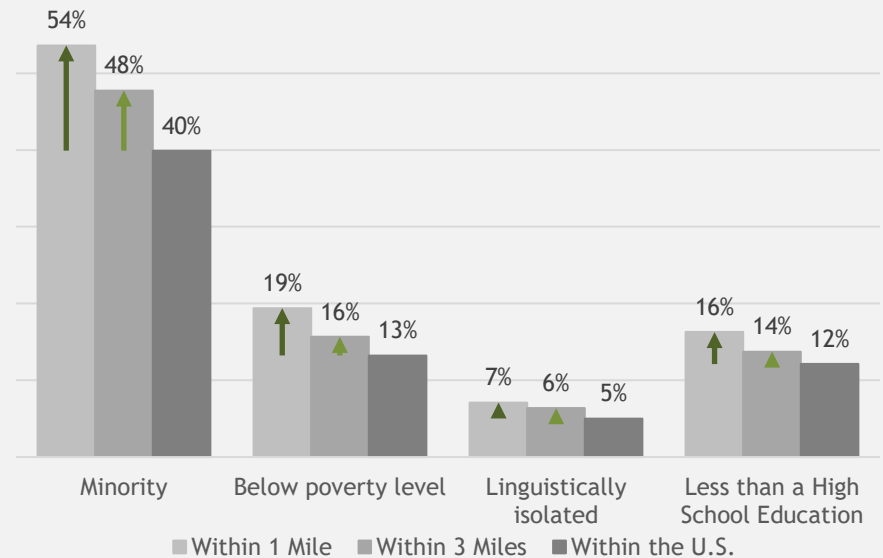
**62 million people**, or **19%** of U.S. population, including **20% of children** under age 5, live within...



The population living within 3 miles and 1 mile of a Brownfield site is:

- more minority,
- more low income,
- more linguistically isolated, and
- less likely to have a high school education

than the U.S. population as a whole.



# What is a “brownfield?”

**Dry Cleaners and Industrial Laundry**



**Manufacturers and Power Generation**



**Agricultural Land and Facilities**



**Public and Commercial Buildings**



**Metal Salvage and Recycling**



**Illegal Dumping**



**Housing and Residential Areas**



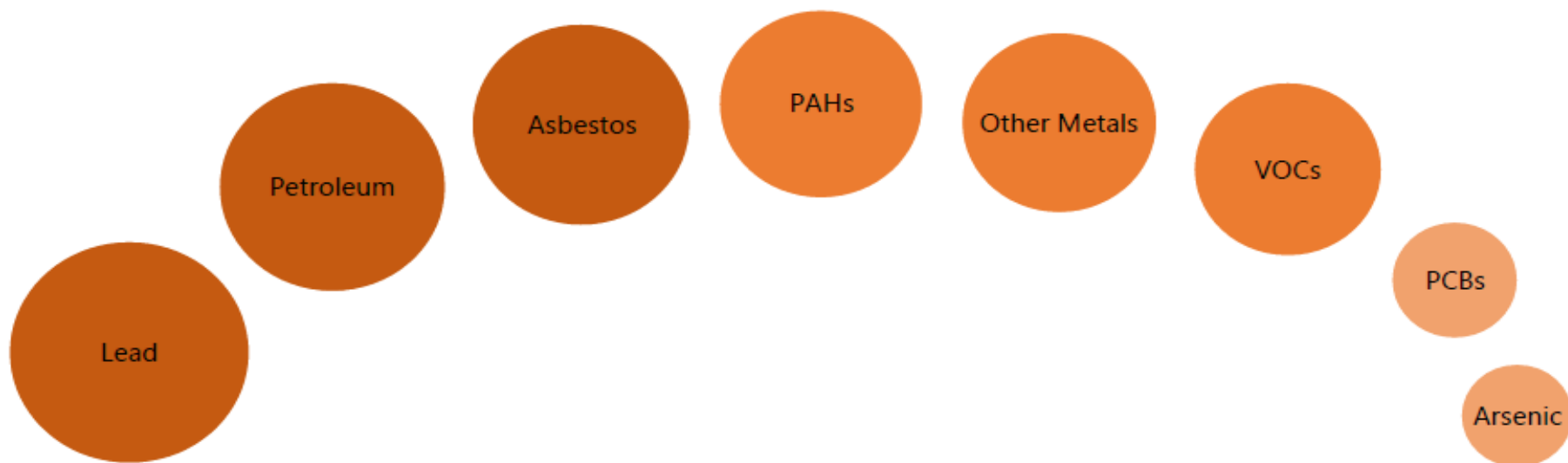
**Gas Stations and Fuel Storage**



**Railroad Facilities**



# What environmental contaminants are commonly reported at brownfields?







When contaminants attach to small dust and soil particles or occur as a vapor, **breathing** can expose people.



Exposure can occur when people **eat or drink** contaminated water, food, dusts or soils. Children that suck their fingers or chew toys contaminated with dust or soils may be exposed.

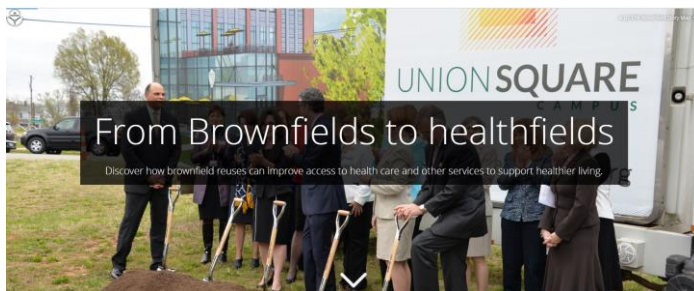


Skin can absorb some forms of contaminants from **direct contact** with contaminated dust and soil particles, the contaminants or vapors.

# Exposure Concerns



# Considering Public Health as part of Brownfields practice



- Considering [community health assessment](#) in brownfield grants applications
- [Health monitoring](#) with public health agencies helps communities exposed to one or more hazardous substances from a brownfield
- [Brownfields to healthfields StoryMap](#) highlights brownfields tackling environmental hazards and creating healthier communities with access to food and health care, safe and healthier housing and places for recreation and greenspace.
- [Health Impact Assessment \(HIA\)](#) – a tool for considering health and creating healthier communities.

Direct

### EPA GRANTS

Assessment  
Cleanup  
Multipurpose  
Revolving Loan Fund  
Brownfields Job Training

### Targeted Brownfields Assessments

### EPA One-on-One Technical Assistance

### EPA Contract Support

### Other EPA Technical Assistance

National Brownfields Conference  
Workshops/Webinars  
Publications  
On-line Tools/Templates

### Technical Assistance from State and Tribal Response Program

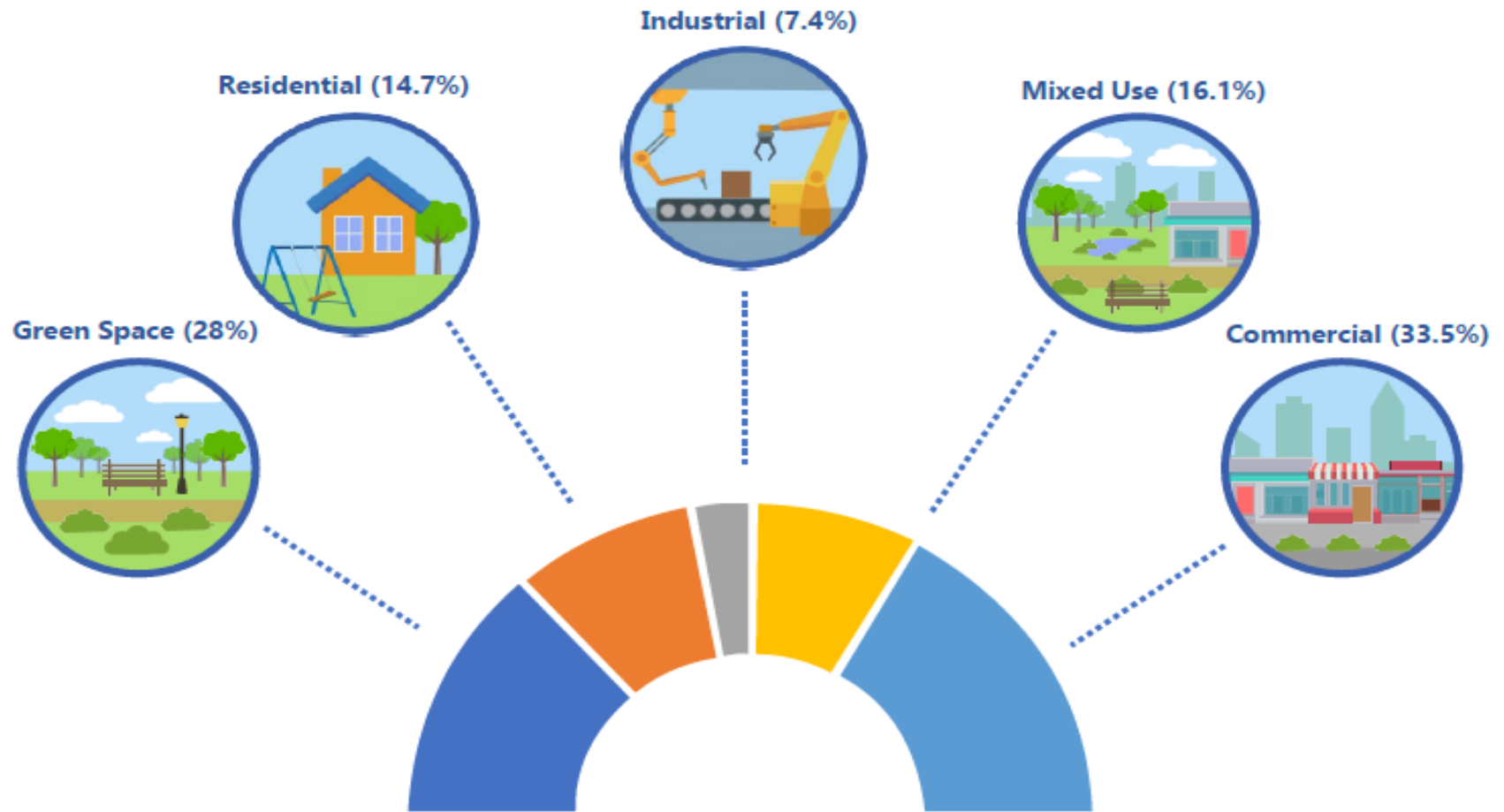


Indirect

### Technical Assistance from EPA Grantees

Groundwork USA  
Association of State & Territorial Solid Waste Mngt Officials  
Hazardous Materials Training & Research Institute  
International City/County Management Assoc.  
Tribal Technical Assistance  
Technical Assistance to Brownfield Communities -  
New Jersey Institute of Technology  
Kansas State University  
Center for Creative Land Recycling  
University of Connecticut  
West Virginia University Research Corporation

# Reuse Choices after Cleanup



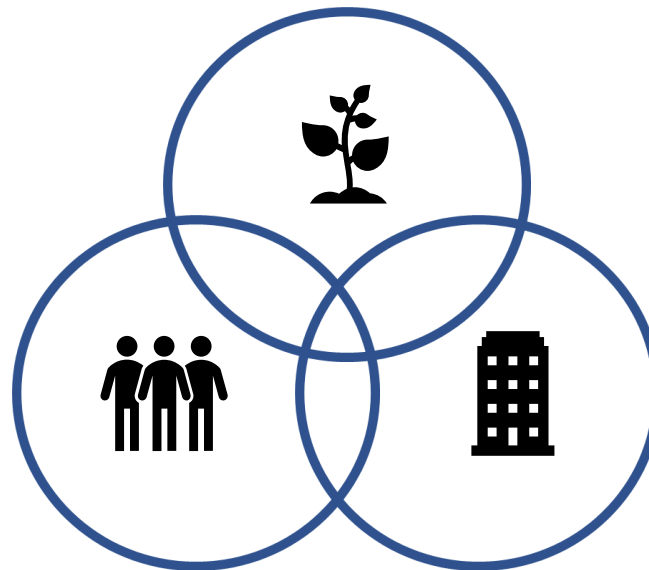
# Environment + Social + Economic

**Revitalize Land and  
Prevent Contamination**

**Invest in  
Historically  
Underserved  
Communities**

**10.3 jobs are  
created for every  
\$100,000 spent.**

**1 brownfield acre  
redeveloped  
prevents the  
creation of 1.3 to  
4.6 acres of new  
impervious surfaces.**



**Every \$1 of EPA  
funding leverages \$20  
in new public and  
private financing**

**Support  
Redevelopment and  
Reuse**

**Redeveloping  
brownfields reduces  
residential vehicle miles  
travelled from growth by  
25 to 33% (and  
associated pollution).**



# How Can Your Brownfield Project Help Create a Healthier Community?



## Questions?

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