access advocacy african american asian american bone density cancer children cardiovascular cholesterol chronic disease churches collaboration community cultural competence DIABETES diet disability disparities diversity education environment evaluation ethnicity exposure faith community financial need goals grassroots health insurance healthcare providers heart disease higher rates **healthy** hispanic american hypertension HIV/AIDS insurance infant mortality initiative intervention language barriers LEAD life expectancy lifestyle low birthweight literacy malnutrition medicare/medicaid men mental health native american nutrition **obesity** partnership overweight pollution prenatal prescription drugs prevention quality of care race risk factors RURAL schools selfesteem socioeconomics solutions stereotypes surveillance technology teenagers tobacco tracking transportation treatment TRUST urban underutilization unequal care underrepresentation **Violence** vaccinations water quality welfare policy women wellness white workplace diversity

Fact Sheets

Environmental Disparities

Environmental factors, ranging from tobacco smoke to chemicals to dietary habits, can cause serious health issues. Research has linked incidence and severity of cancer, asthma, Alzheimer's, autism, birth defects, endometriosis, infertility, and multiple sclerosis to environmental contaminants.¹ For example:

- Asthma is the most common chronic disease in children and has been strongly linked to environmental exposures.¹
- Learning disabilities have been associated with toxic chemical exposure and affect between 5 and 10 percent of children in public schools.¹
- High bone lead levels have been linked to low birth weight. ⁵ In addition, DDT is linked to preterm birth, a leading cause of infant death in the United States.¹
- Evidence suggests that Parkinson's disease may occur from an interaction between genes and exposure to certain chemicals such as pesticides, fertilizers, and fungicides.¹
- Many types of cancer may not be inherited, but may be linked to environmental factors, including tobacco smoke, chemicals, dietary habits and viral infections.
- The National Toxicology Program recently listed 228 chemicals as known or reasonably anticipated human carcinogens.¹

Exposure to environmental risks varies based on race and ethnicity. Minorities are at greater risk of exposure to synthetic chemicals.²

- African-Americans. African-Americans are much more likely to be exposed to dioxins and polychlorinated biphenyls and to be exposed at higher levels. In the mid-1990s, high lead blood levels were found in 4.4 percent of all U.S. children and in 22 percent of African-American children.
- Mexican Americans. Mexican Americans are much more likely to be exposed to pesticides, herbicides, and pest repellants and to be exposed at higher levels.²
- Whites. Whites are much more likely to be exposed to polycyclic aromatic hydrocarbons and phytoestrogens.²

Exposure to environmental risks varies based on income. People in low-income communities often have less healthy surroundings than people in other communities.³

- Low-income communities are often located in or near polluting industrial areas and have cheap, older housing where lead paint and pests are a threat.³
- A greater proportion of poor communities live in polluted environments and work in hazardous conditions and occupations.⁶
- Low-income communities receive less treatment for environmental disease because healthcare resources are limited.³
- In the mid-1990s, high lead blood levels were found in 4.4 percent of all U.S. children and 16 percent of children from low-income families.⁶
- Almost 300,000 farm workers suffer pesticiderelated illnesses each year.⁶

Exposure to environmental risks varies based on geography.

- Living near water. Native American children eat large amounts of fish that may be contaminated with polychlorinated biphenyls, mercury, lead, and fluoride.⁴
- Living in urban areas. African-American women who live in the South Bronx are exposed to auto exhaust and tend to have smaller babies with smaller head circumferences. In Central Harlem, 25 percent of the children have asthma, which has been linked to high exposure to diesel exhaust. Northern Manhattan has a third of the nation's largest diesel bus fleet and the city's highest concentration of diesel bus depots.
- http://www.breastcancerfund.org/calbbc/fs_ biomonitoring.htm
- 2. http://www.ejhu.org/eerdexecsum.htm
- 3. http://www.ejhu.org/disparities.html
- 4. http://www.niehs.nih.gov/oc/factsheets/disparity/child.htm
- 5. http://www.niehs.nih.gov/oc/factsheets/disparity/lead.htm
- "Building Healthy Environments to Eliminate Health Disparities Symposium," United States Environmental Protection Agency, May 28-29, 2003, Washington, D.C.

