

Addressing Cumulative Risks in Vulnerable Populations

A Community Perspective

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Where were you on April 3, 1968?

(Only answer if you are over 40)

Dr. King Speaks in Support of Garbage Workers – April 3, 1968



Environmental Justice -Memphis Garbage Strike





Donated By Corbis-Bettina

King Assassination -- April 4, 1968



Twenty-Five Years Since Warren
County, NC PCB Landfill Protests
1982-2007

Warren County, NC - 1982



- The environmental justice movement was born in rural Warren County, NC
- Triple “whammy” of rural, poor, and mostly black
- Over 500 demonstrators were arrested protesting the siting of a hazardous PCB landfill



**Race, Class, and
Environmental Quality**

The Nations' Dumping Grounds

DUMPING IN DIXIE

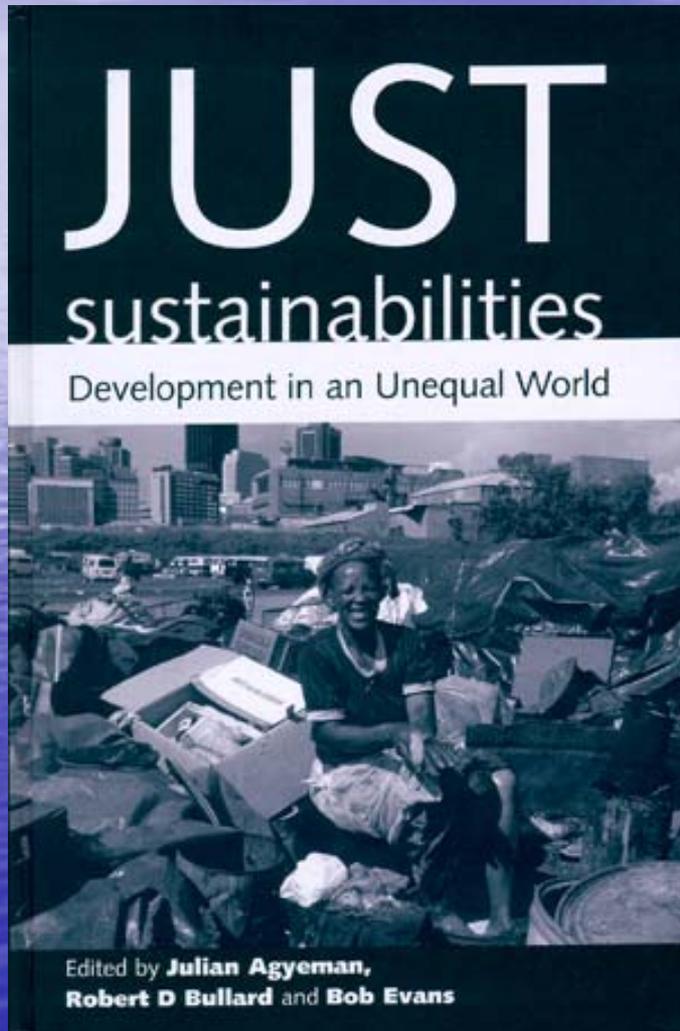


**Race, Class, and
Environmental Quality**

Robert D. Bullard

- All communities are not created equal
- If a community happens to be poor, working class, comprised largely of people of color, and spatially located on the “wrong side of the tracks,” it receives more than its fair share of locally unwanted land uses or LULUs

A Question of Vulnerability



- Environmental degradation is almost always linked to questions of human quality of life
- Social vulnerability involves the basic provision of health care, the livability of places, overall indicators of quality of life, and accessibility of lifelines (goods, services, emergency response personnel), capital, and political representation



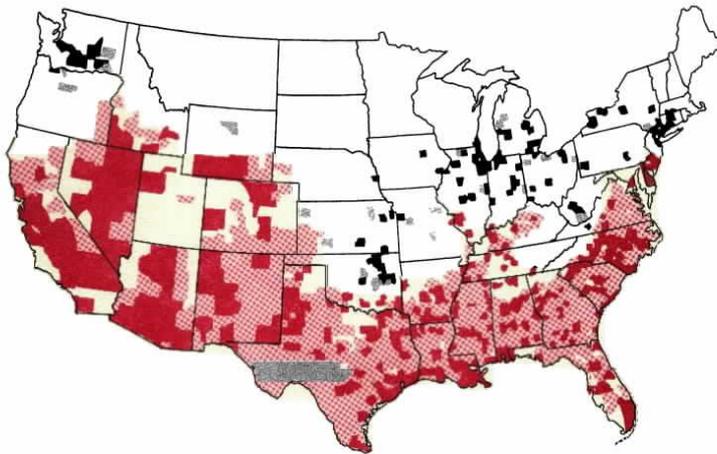
Twenty Years Since the NIEHS
Training Program Began

Twenty Years Since the United
Church of Christ 1987 "Toxic
Wastes and Race" report

Toxic Wastes and Race in the United States - 1987

TOXIC WASTES AND RACE In The United States

**A National Report on the Racial and Socio-Economic
Characteristics of Communities
with Hazardous Waste Sites**



COMMISSION FOR RACIAL JUSTICE
United Church of Christ
©1987

- The United Church of Christ Commission for Racial Justice produced the first national study linking race and the location of hazardous waste sites

WARNING! WARNING! WARNING!



- Your physical environment can be hazardous to your health



Environmental Risks are Not
Randomly Distributed

Environmental Health Threats

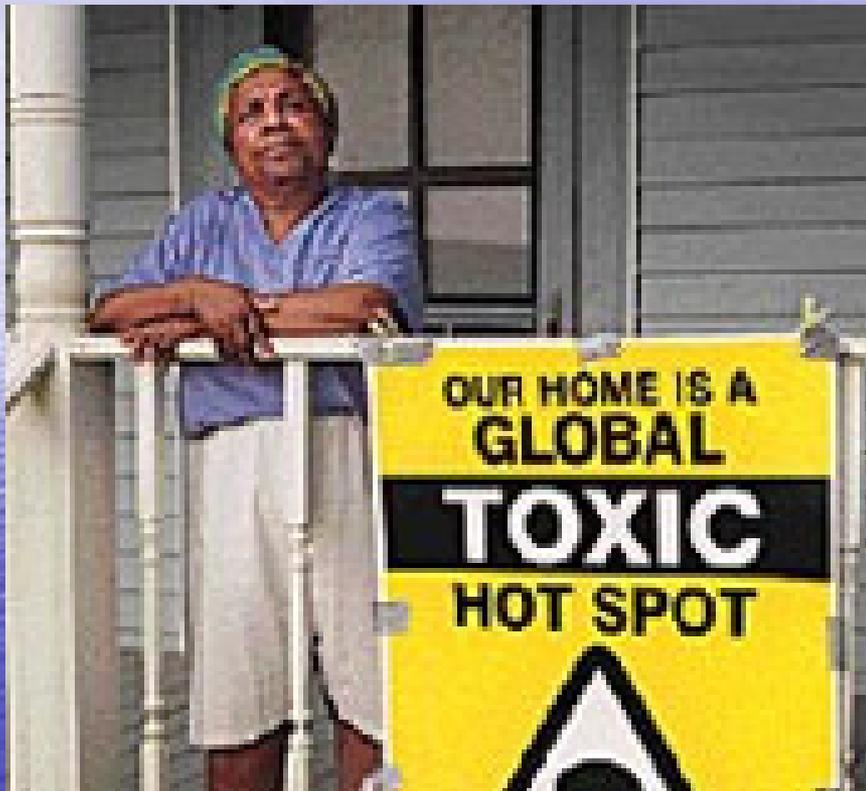


- Where We Live
- Where We Work
- Where We Play
- Where We Go to School
- Physical and Natural World

Wrong Side of the Tracks



Living with Threats at the Fenceline



- Environmental, economic, and health disparities pose real threats in the nation's low-income, people of color, and indigenous communities
- Many "fenceline" communities are in the direct path of accidents, spills, explosions, and routine toxic emissions



Warren County PCB Landfill Detoxification Project 2003



- Detoxification work began on the PCB landfill in June 2001 and ended the latter part of December 2003—two decades years after the site was created in 1983
- The State of North Carolina and federal sources spent \$18 million to detoxify the contaminated soil stored at the PCB landfill
- Warren County still does not have a hospital
- The nearest hospitals are located in neighboring Vance County (15 miles away) and across the state line in South Hill, Virginia (33 miles away)

**WARREN COUNTY PCB LANDFILL
DETOXIFICATION PROJECT**

PROJECT NUMBER 010440101A

**OWNER: NORTH CAROLINA DEPT. OF
ENVIRONMENT & NATURAL RESOURCES**
DIVISION OF WASTE MANAGEMENT

OWNERS CONSULTANT: EARTH TECH, INC.

CONTRACTOR: SHAW E & I, INC.



Communities at Special Risk

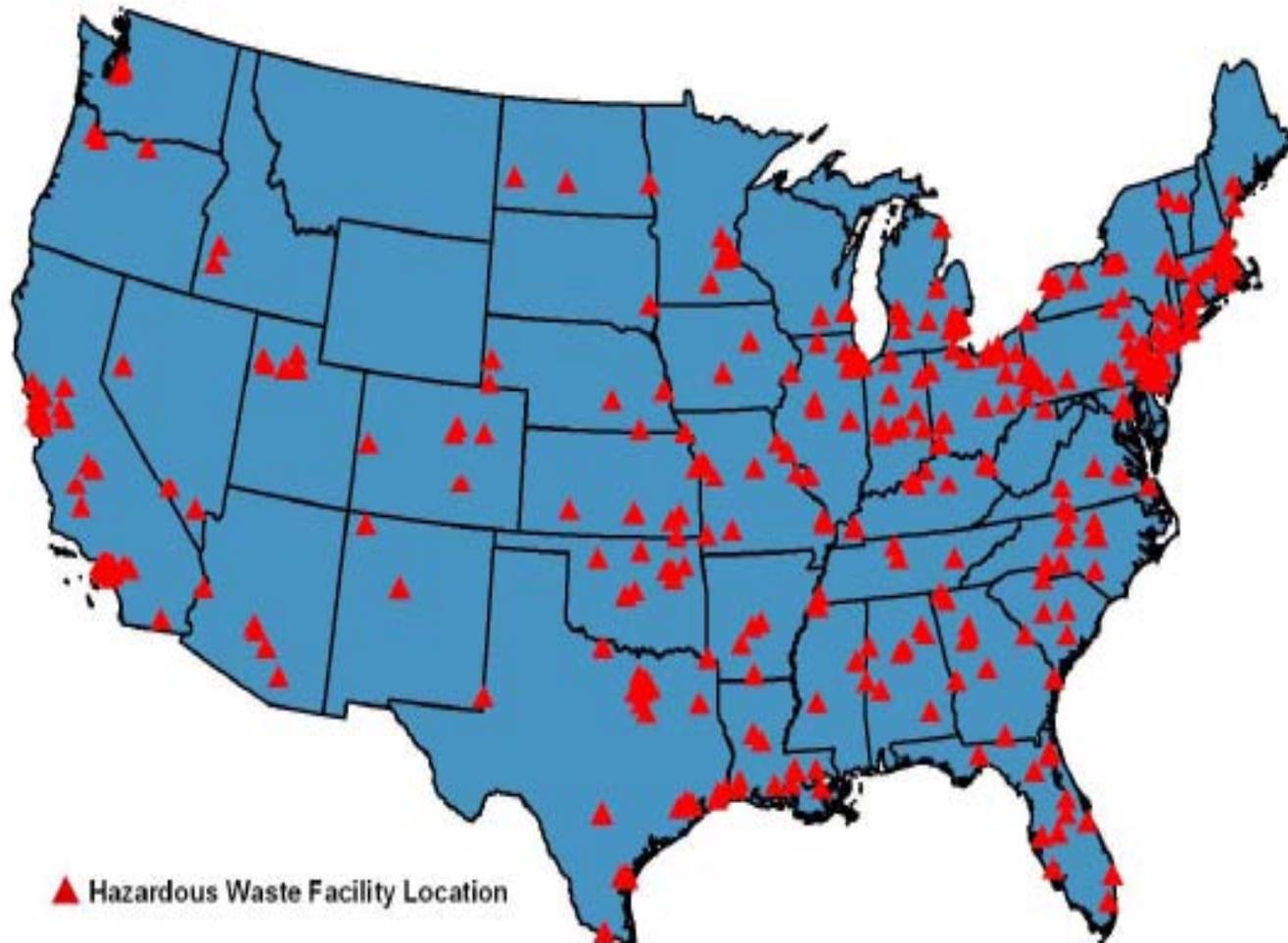


- African Americans are 79 percent more likely than whites to live in neighborhoods where industrial pollution is suspected of posing the greatest health danger
- African Americans in 19 states are more than twice as likely as whites to live in neighborhoods with high pollution and a similar pattern was discovered for Hispanics in 12 states and Asians in 7 states

Source: Associated Press (2005)

Toxic Wastes and Race at Twenty: 1987-2007

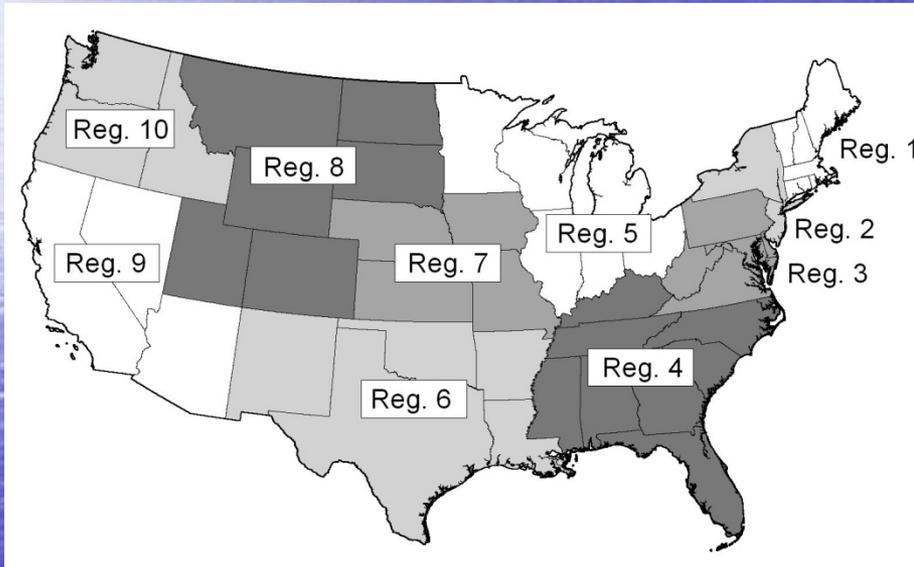
Grassroots Struggles to Dismantle Environmental Racism in the United States



Toxic Wastes and Race - 2007

- Race continues to be a significant independent predictor of commercial hazardous waste facility locations when socioeconomic and other non-racial factors are taken into account
- People of color make up the majority (56%) of those living in neighborhoods within 3 kilometers (1.8 miles) of the nation's commercial hazardous waste facilities, nearly double the percentage in areas beyond 3 kilometers (30%)
- People of color make up a much larger (over two-thirds) majority (69%) in neighborhoods with clustered facilities
- People of color in 2007 are more concentrated in areas with commercial hazardous sites than in 1987

Disparities by EPA Region

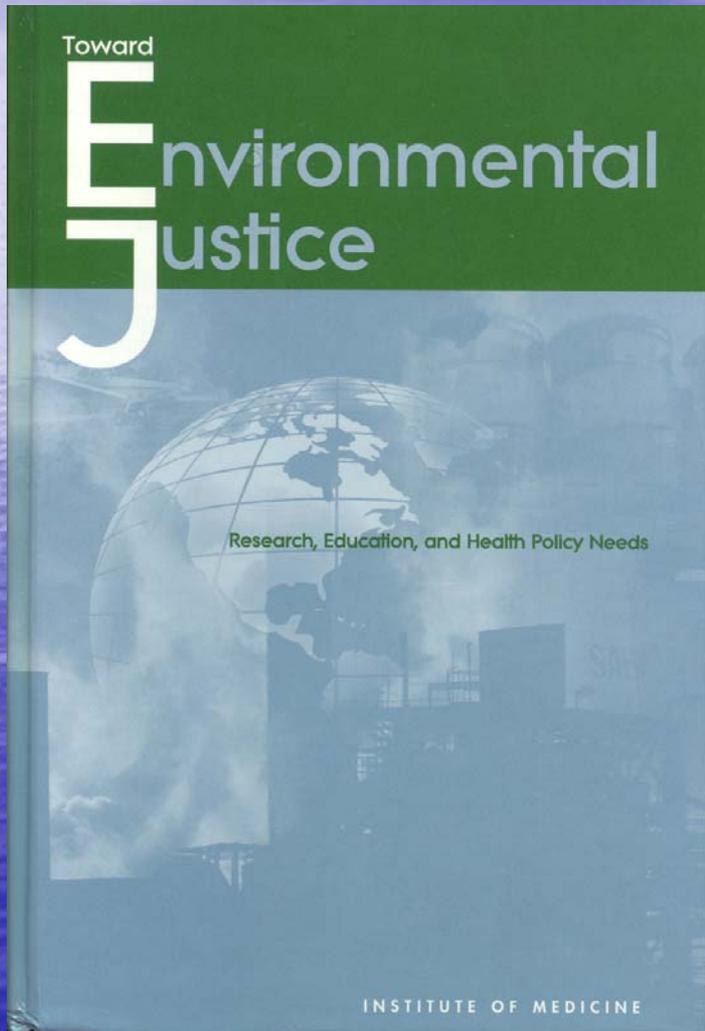


- Racial disparities for people of color as a whole exist in 9 out of 10 EPA regions (all except Region 3)
- Disparities in people of color percentages between host neighborhoods and non-host areas are greatest in: Region 1, the Northeast (36% vs. 15%); Region 4, the southeast (54% vs. 30%); Region 5, the Midwest (53% vs. 19%); Region 6, the South, (63% vs. 42%); and Region 9, the southwest (80% vs. 49%)

A serene background image featuring a clear blue sky with wispy white clouds at the top. Below the sky is a vast, deep blue ocean. A bright sun is positioned on the left side, creating a shimmering white reflection that stretches across the water's surface towards the center. The overall mood is calm and expansive.

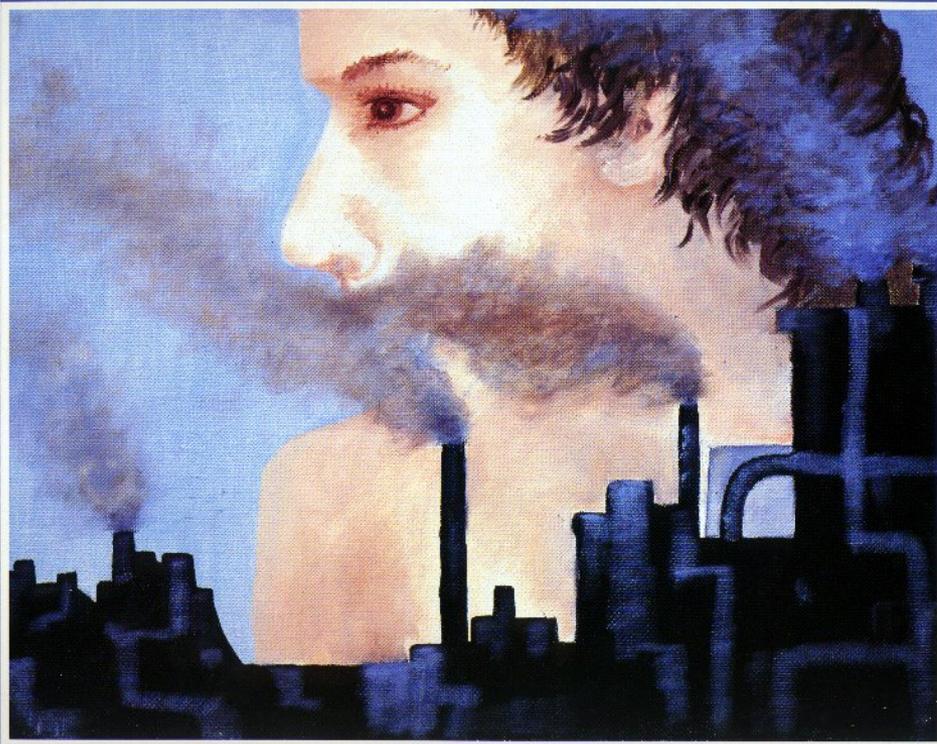
Life is not one risk at a time.

Institute of Medicine Study Environmental Justice - 1999



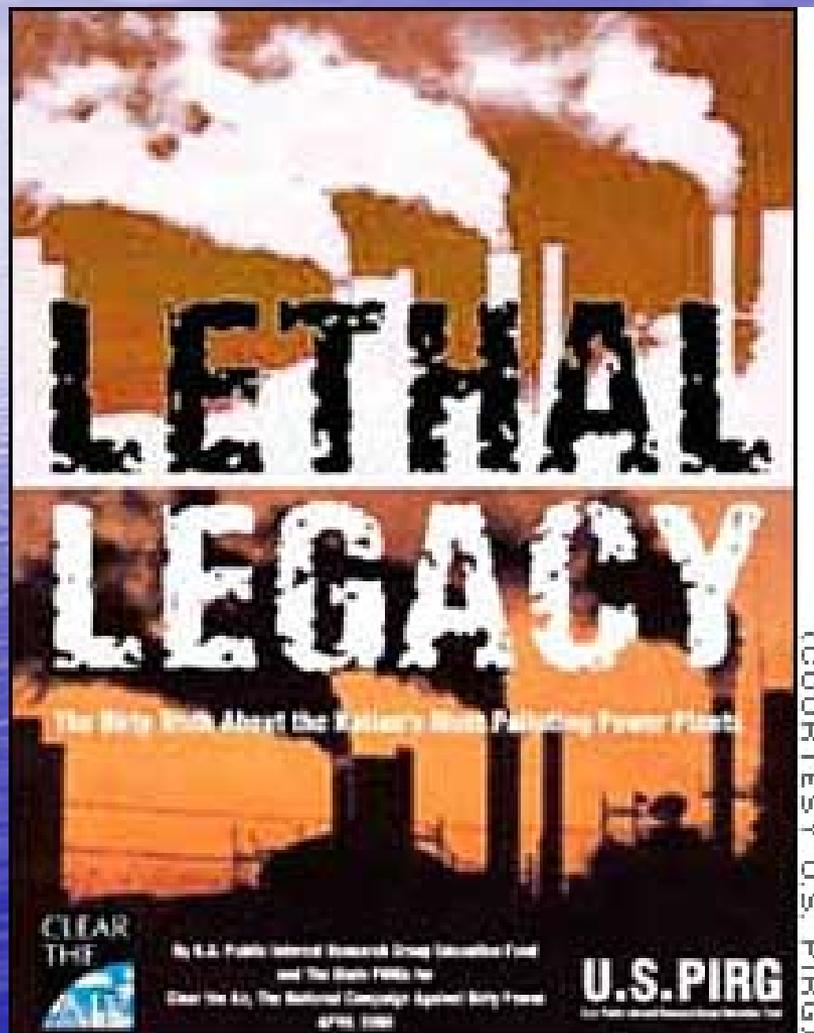
- The 1999 IOM Study confirmed that people of color and low-income communities are exposed to higher levels of pollution than the rest of the nation
- These groups also experience certain diseases in greater number than more affluent white communities

“Dirty Power” Plants



- Over 78% of African Americans live within 30 miles of a power plant—the distance within which the maximum effects of the smokestack plumes are expected to occur, compared with 56% of white Americans
- Over 35 million American children live within 30 miles of a power plant, of which an estimated two million are asthmatic

It's Raining Mercury



- Coal-burning power plants are the major source of mercury pollution
- Much of the mercury stays airborne for two years and spreads around the globe
- One recent study found fetus-harming levels of mercury in about 8% of U.S. women of childbearing age
- Efforts to limit mercury from the 1,100 coal-burning power plants that are the main source of mercury pollution are mired in politics

Lead Paint Makes Toxic Homes



- Lead poisoning is the number one environmental health threat to children in the United States
- Lead poisoning is a preventable disease
- Low-income children are eight times more likely than those of affluence to live where lead paint causes a problem
- Black children are five times more likely than white children to suffer from lead poisoning
- The World Health Organization estimates the effect of lead poisoning to be about 1 to 3 points of IQ lost for each 10 ug/dl lead level.



Toxic Public Housing



- A 2000 *Dallas Morning News* study found that 870,000 of the 1.9 million (46%) housing units for the poor, mostly minority families, sit within one mile of TRI reporting factories
- When accidents, explosions, and spills occur at petrochemical plants, nearby residents are instructed to “shelter in place,” close their doors and windows, stay inside, and pray



Toxic Sites Near Public Schools



- More than 600,000 students in MA, NY, NJ, MI, and CA attend nearly 1,200 public schools (attended by mostly students of color) that are located within a half mile of a federal Superfund or state identified contaminated site

**AS PARENTS, WE ALL WANT
OUR KIDS TO PLAY
OUTSIDE . . . BUT WHAT
ABOUT TOXIC PARKS?**







Dixon Park Jogging/Walking Trail

Start Line Kiosk
Routes and distance
for 4 different
trail options



Park in Norco, Louisiana







Park in Camden, New Jersey





Park in West Harlem, New York





Park in Baytown, Texas









Transportation and Pollution



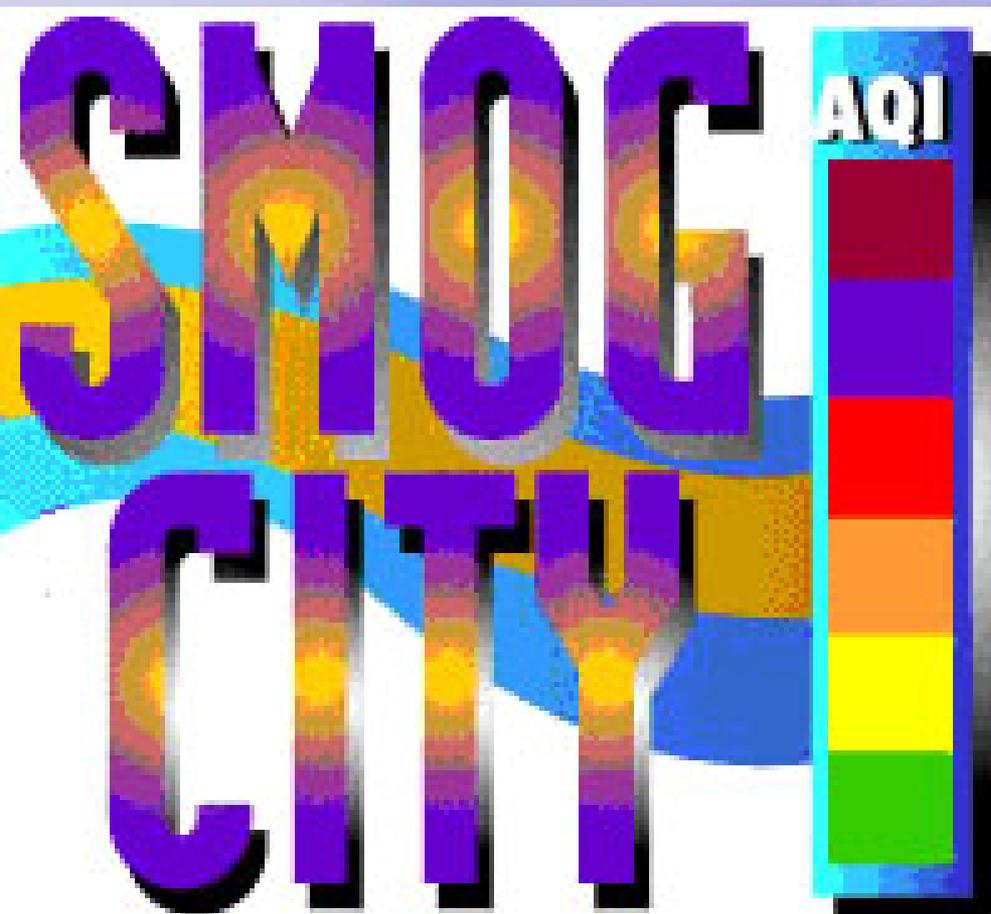
- Transportation sources account for 80% of carbon monoxide, 45% of nitrogen oxide, 35% of hydrocarbons, 32% of carbon dioxide, 19% of particulate matter, and 5% of sulfur dioxide
- Over 24% of black households, 17% of Hispanic households, 13% of Asian American households, and 7% of white households do not own cars

Geography of Air Pollution



- Nationally, 57% of whites, 65% of blacks, and 80% of Hispanics live in counties with substandard air
- More than 61.3 percent of African American children, 69.2 percent of Hispanic children and 67.7 percent of Asian-American children live in areas that exceed the 0.080 ppm ozone standard, while 50.8 percent of white children live in such areas

TOUGHER OZONE STANDARDS



- EPA's own [Clean Air Scientific Advisory Committee \(CASAC\)](#), an independent body chartered under the Clean Air Act, concluded that the current ozone standard (80 ppb) is not adequate to protect human health and unanimously recommended EPA set a new tougher standard in the range of .60 to 70 parts per billion
- This March, EPA set the new ozone standard at **75** ppb
- New epidemiological and clinical studies reveal that breathing ozone at concentrations at the current standard of 80 ppb decreases lung function, increases respiratory symptoms, inflammation, and increases susceptibility to respiratory infection
- EPA calculates that the new standard of 75 ppb would prevent 1,300 to 3,500 premature deaths a year, whereas 65 ppb would avoid 3,000 to 9,200 deaths annually

Ground Level Ozone and Health



- Over 27 million children under age 13 live in areas with ozone levels above the EPA standard
- Half the pediatric asthma population, two million children, live in these areas
- Ground level ozone sends an estimated 53,000 persons to the hospital, 159,000 to the emergency room and triggers 6,200,000 asthma attacks each summer in the eastern half of the United States.
- Ozone pollution is responsible for 10 percent to 20 percent, and nearly 50 percent on bad days, of all hospital admissions for respiratory conditions



VULNERABLE POPULATIONS



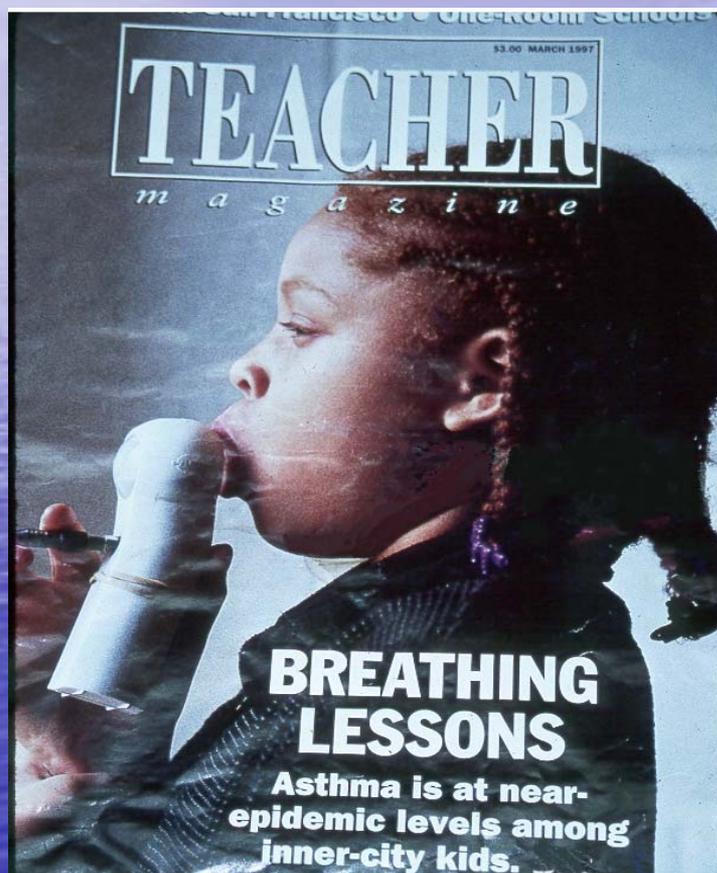


Paying with Our Health



- Air pollution claims 70,000 lives a year, nearly twice the number killed in traffic accidents
- Public health costs due to air pollution account for over three-quarters of the total pollution-related public health costs and could be as high as \$182 billion annually
- An estimated 50,000 to 120,000 premature deaths are associated with exposure to air pollutants
- People with asthma experience more than 100 million days of restrictive activity annually, costing \$4 billion a year

THE RIGHT TO BREATHE



- Air pollution has been linked to rising asthma rates
- Asthma hits poor, inner city children the hardest
- African Americans and Latinos are two to six times more likely than whites to die from asthma
- Asthma hospitalization rate for African Americans and Latinos is 3 to 4 times the rate for whites

An Asthma Epidemic



- Asthma affects 15 to 17 million people, including 5 million children in the U.S.
- Six percent of U.S. children have asthma
- Asthma is now the nation's number one childhood illness
- Asthma is the number one reason for childhood emergency room visits and school absenteeism



Addressing Cumulative Risks Before and After Disasters Strike



IN THE WAKE OF THE STORM

ENVIRONMENT, DISASTER, AND RACE AFTER KATRINA

A REPORT FROM THE RUSSELL SAGE FOUNDATION



RUSSELL SAGE FOUNDATION
112 East 64th Street
New York, New York 10021
www.russellsage.org

Cover design by Genna Palacasli
Photo © Michael Macori/San Francisco Chronicle/Corbis

**MANUEL PASTOR, ROBERT D. BULLARD, JAMES K. BOYCE,
ALICE FOTHERGILL, RACHEL MORELLO-FROSCH, BEVERLY WRIGHT**



The “Mother of All Toxic Cleanups” in the U.S.



- Katrina floodwaters left miles of sediments laced with cancer-causing chemicals, toxic metals, industrial compounds, petroleum products, and banned insecticides, all at levels that pose potential cancer risk or other long-term hazards
- Government agencies have chosen not to clean up the contaminated topsoil where 80% of New Orleans flooded homes sit
- Since Katrina struck, more than 99 million cubic yards of debris have been removed in Alabama, Louisiana, and Mississippi

Clean Enough for Horses . . .



- Although government officials insist the dirt in New Orleans residents' yards is safe, Church Hill Downs, Inc., the owners of New Orleans' Fair Grounds, felt it was not safe for its million dollar thoroughbred horses to race on
- The owners scooped up and hauled off soil tainted by Hurricane Katrina's floodwaters and rebuilt a grandstand roof ripped off by the storm's wind
- The Fair Grounds opened on Thanksgiving Day 2006
- The Fair Grounds is the nation's third-oldest track—only Saratoga and Pimlico have been racing longer



New Orleans Gets Clean Bill of Health



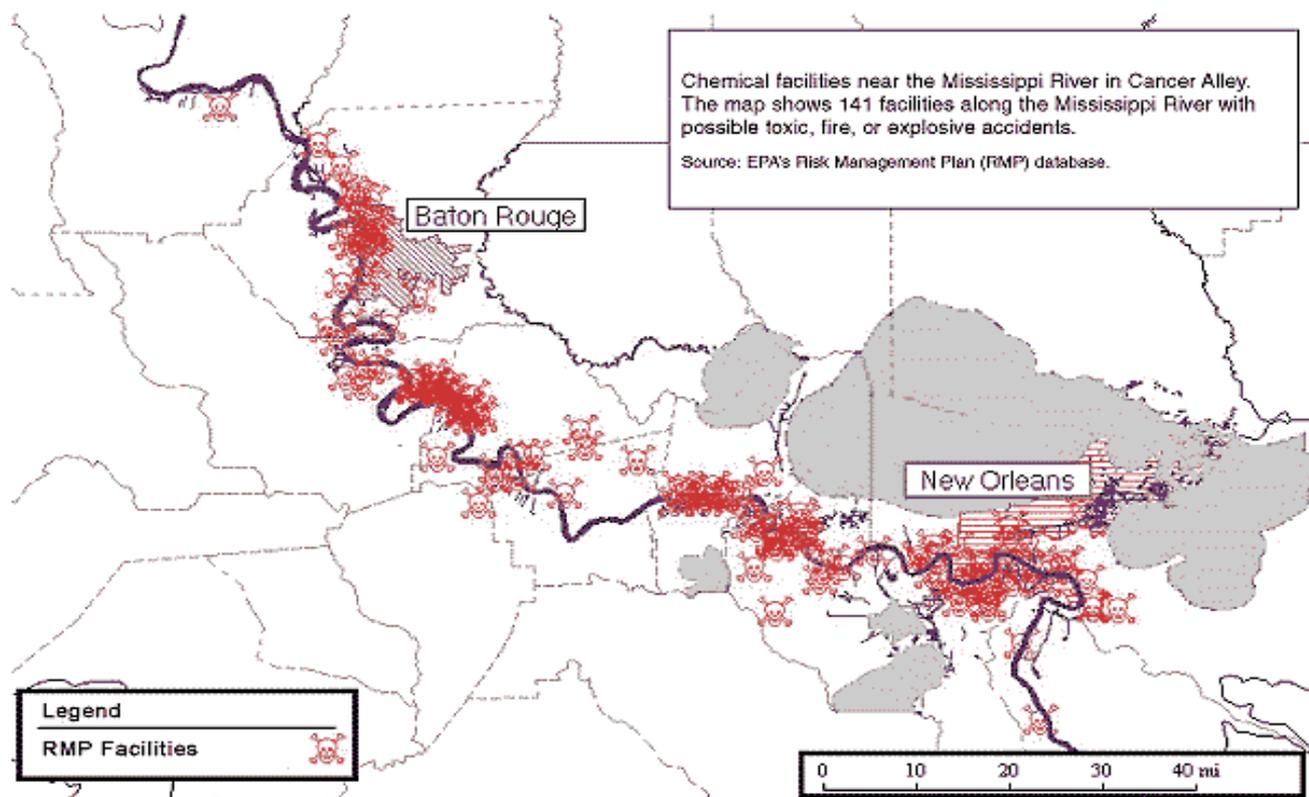
- On August 17, 2006, nearly a year after Katrina struck, the federal EPA gave New Orleans and surrounding communities a clean bill of health, while pledging to monitor a handful of toxic hot spots
- EPA officials concluded that “Katrina did not cause any appreciable contamination that was not already there”
- Although EPA tests confirmed widespread lead in the soil, a pre-storm problem in 40 percent of New Orleans, EPA dismissed residents’ calls to address this problem as outside it’s mission

Pre-Katrina - Living and Dying in Louisiana's "Cancer Alley"



- Dozens of toxic "time bombs" along Louisiana's "Cancer Alley," the 85-mile stretch from Baton Rouge to New Orleans, made the industrial corridor a major environmental justice battleground
- Before Katrina, New Orleans was struggling with a wide range of environmental justice and health concerns, including an older housing stock with lots of lead paint

Louisiana's Cancer Alley



GREENPEACE

www.greenpeaceusa.org • 3/22/01

Living on a Toxic Dump



- Residents of New Orleans' Press Park neighborhood were living on top of the Agricultural Street Landfill Superfund site
- The landfill was reopened in 1965 for the disposal of debris from Hurricane Betsy
- Moton Elementary School was also built on the landfill site
- Before Hurricane Katrina, residents of Agricultural Street had been fighting a legal battle for decades to get relocated from the site
- The lawsuit was finally settled in January 2006 where the judge declared the neighborhood "unreasonably dangerous" and "uninhabitable"





NO PARKING
EXCEPT FOR
LOADING AND UNLOADING
PASSENGERS

What is in **Your House?**
Toxic Landfill
GREENPEACE

CONCERN CITIZENS OF AGRICULTURE
STREET LAND-FILL ENVIRONMENTAL
RACISM MUST STOP IN NEW ORLEANS
LOUISIANA

ORANGE TRAFFIC CONES



MOTON
ELEMENTARY



Contaminated Homes Denied Funds



- Just recently, Louisiana's \$10.3 billion Road Home program that pays homeowners up to \$150,000 to rebuild their homes or to buy them out and transfer the land to a New Orleans redevelopment authority denied funds to Ag Street Landfill area residents
- After Hurricane Katrina, when the EPA tested the ground in New Orleans and gave the city a clean bill of health, there was one glaring exception: In the old Ag Street landfill area, yards had 50 times the normal level of the cancer-causing petroleum byproduct benzo(a)pyrene
- Nevertheless, FEMA trailers were supplied for properties in the area

FEMA's Toxic Travel Trailers



- In February 2008, more than two years after residents of FEMA trailers deployed along the Mississippi Gulf Coast began complaining of breathing difficulties, nosebleeds and persistent headaches, CDC confirmed that the FEMA trailers pose a serious danger to residents still living in them
- CDC trailer tests revealed average formaldehyde levels of 77 ppb (parts per billions), significantly higher than the 10 to 17 ppb concentration seen in newer homes Levels were as high as 590 ppb
- Levels of formaldehyde gas in 519 trailer and mobile homes tested in Louisiana and Mississippi were about five times what people are exposed to in most modern homes

The Cost of Healthy Homes



- Some 38,000 families, or roughly 114,000 individuals, are currently living in FEMA-provided travel trailers or mobile homes along the Gulf Coast
- Apartment rents in New Orleans and the Gulf Coast have doubled and in some cases tripled since the 2005 storm

Endangered Health Safety Net

Save Charity Hospital



- Hurricane Katrina closed New Orleans' Charity Hospital
- The nation has seen the demise of numerous public hospital "safety net" for the urban poor
- Closure of urban public hospitals – Washington, DC General (2001), New Orleans Charity Hospital (2005), Los Angeles MLK Jr. Harbor Hospital (2007)
- Atlanta's Grady Hospital, one of the largest in the country, is in financial trouble--where more than 90% of hospital's patients are uninsured

For More Information Contact:

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