Black Leade hip Fo m Clea The Ai Geo gia Coali ion fo he People ' Agenda The So he n O gani ing Commi ee fo Economic and Social J ice

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

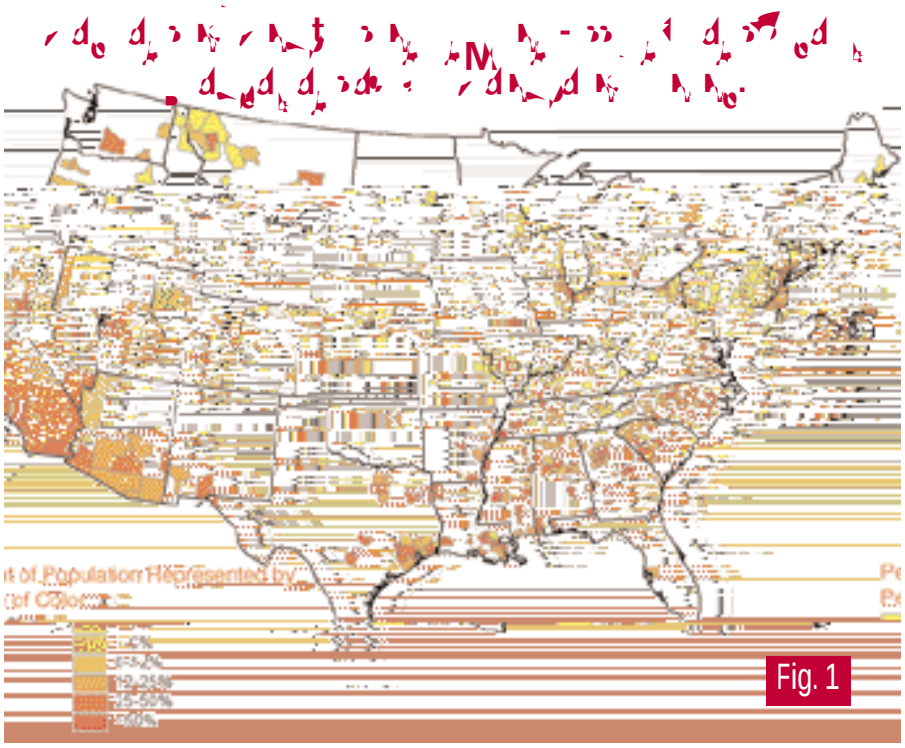

Fig. 1

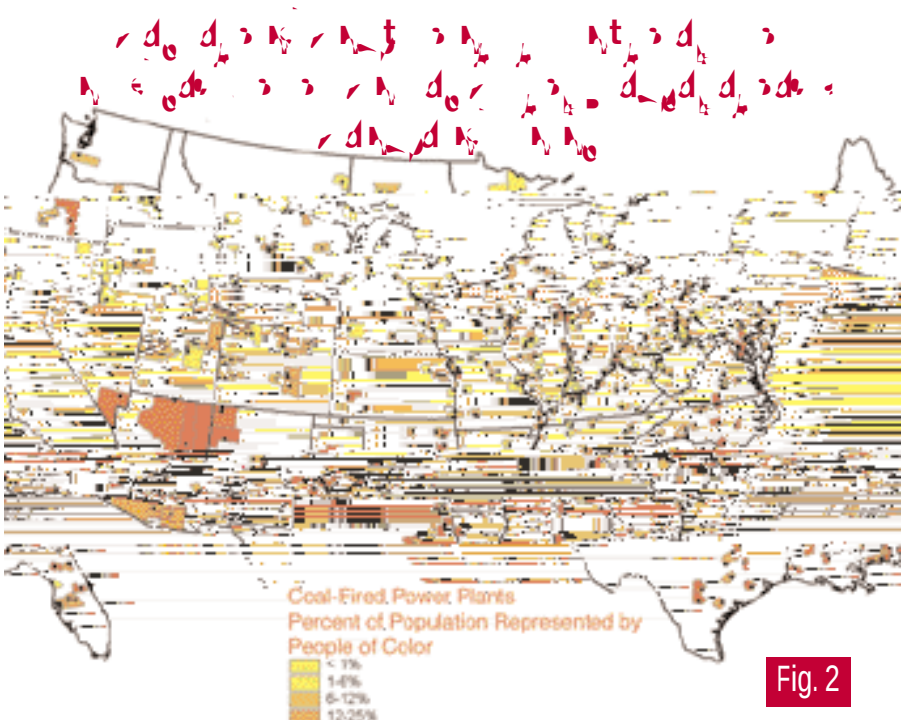
Coal-Fired Power Plants
Percent of Population Represented by
People of Color

Fig. 2

Ozone	Ozone is a highly corrosive, invisible gas.	Ozone is formed when NOx reacts with other pollutants in the presence of sunlight.	Rapid shallow breathing, airway irritation, coughing, wheezing, shortness of breath. Associated with asthma attacks and related emergency room visits and hospitalizations, and possible slowed lung growth in children.	Children, the elderly, people with asthma or other respiratory disease. People who exercise outdoors.
Sulfur Dioxide (SO_2)	SO_2 is a highly corrosive, invisible gas that is formed in the gases when coal is burned. Sulfur occurs naturally in coal.	SO_2 is formed in the gases when coal is burned. SO_2 reacts in the air to form sulfuric acid and sulfates. Together with NOx, it forms acidic particles.	Coughing, wheezing, shortness of breath, nasal congestion and inflammation. Makes asthma worse. SO_2 gas can de-stabilize heart rhythms. Low birth weight, increased risk of infant death.	Children and adults with asthma or other respiratory disease.
Particulate Matter (PM)	A mixture of small solid particles (soot) and tiny acidic particles.	Formed by SO_2 and NOx in the atmosphere.	PM is inhaled deep into the lungs, affecting respiratory and cardio-vascular systems. Linked to asthma attacks, premature birth, infant death and adverse birth outcomes..	Elderly, children, people with asthma. African American children have higher rates of asthma, making them more susceptible.
Nitrogen Oxides (NOx)	A family of chemical compounds including nitrogen oxide, nitrogen dioxide.	NOx is formed when coal is burned. In the atmosphere can convert to nitrates and form fine acidic particles. Reacts in the presence of sunlight to form ozone smog.	NOx changes lung function, increases respiratory disease in children. Helps form ozone and acidic PM particles which are linked to respiratory and cardio-vascular disease, low birth weight and premature birth.	The elderly, children, people with asthma.
Mercury	A metal that occurs naturally in coal.	Mercury is released when coal is burned.	Developmental effects in babies that are born to mothers who ate contaminated fish while pregnant. Poor performance on tests of the nervous system and learning. In adults may affect blood pressure regulation and heart rate.	Fetuses and children are directly at risk. Pregnant
Carbon Dioxide	Coal has the highest carbon content of any fossil fuel.	Carbon dioxide is formed when coal is burned.	Health effects from the spread of infectious disease, higher ozone levels, increased heat-	

[illegible]

[illegible]

[illegible]

[illegible]

Photo ©2002 David Bacon

A study of emergency room visits and their relationship to ozone air pollution levels was conducted in an indigent, predominantly African American population in Atlanta. In the summer of 1990, 609 visits to the hospital were made by children aged 1 to 16 for treatment of asthma or reactive airway disease. The number of visits for asthma was 37% higher on days following elevated ozone levels. The results of the study suggest that among African American children from low-income families, asthma may be exacerbated following periods of high ozone pollution.

[illegible]

Methylmercury interferes with the development and function of the central nervous system [illegible]. Prenatal exposure from maternal consumption of fish can cause later impairments in children. Infants appear normal during the first few months of life, but later display subtle health effects such as poor performance on neurobehavioral tests, particularly on tests of attention, fine motor function, language, visual-spatial abilities (e.g., drawing) and memory. These children will likely have to struggle to keep up in school and might require remedial classes or special education.

Children and developing fetuses are most vulnerable to mercury exposure. Methylmercury in fish consumed by the mother passes through the placenta to the developing fetus. Mercury exposure prior to pregnancy is as critical as exposure during pregnancy because mercury is stored in tissues and is slowly excreted from the body. The first weeks of pregnancy also represent a critical time for fetal development. Pregnant women and women of childbearing age (i.e., 15 to 44 years of age) are those who most need to avoid mercury exposure.

[illegible]

[illegible]

[illegible]

[illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]

[illegible]

[illegible]

Photo by Zachary Porter, Benjamin E. Mays Center – Georgia Kids Against Pollution.

[redacted]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]