

# End Double Jeopardy

By **Rachel Morello-Frosch**, environmental health scientist

**New principles can stop us from dumping on minorities and the poor**

SKIN COLOR AND WEALTH REMAIN PERVERSIVE FAULT LINES IN U.S. society, as best proved by the persistence of economically and racially segregated communities. People living in these places face excessive stressors, including poverty, substandard housing, malnutrition and lack of health care. Environmental burdens—notably pollution from power plants, freeway corridors and chemical manufacturing plants—are also concentrated in the same neighborhoods.

Each of these inequalities is bad enough on its own. Yet the National Academy of Sciences' Institute of Medicine describes this combined exposure as “double jeopardy,” because social stressors can impair an individual's ability to fend off illnesses that pollution creates or aggravates. Indeed, studies show that air pollution is more likely to cause respiratory and cardiovascular diseases, as well as premature deaths, among people in lower socioeconomic groups. The combined threat is particularly hard on fetuses, infants and adolescents and on adults who have high blood pressure or diabetes. Individuals in poor rural areas, as well as in low-income urban communities such as Richmond, Calif., suffer disproportionately from childhood asthma, in part because of inadequate housing, deficient medical care and proximity to multiple sources of air pollution.

Scientists and environmental justice advocates alike argue that better policies are needed to address double jeopardy. Three important steps can be taken. First, local, state and federal agencies should enhance public participation in regulatory decision making so that even the disadvantaged can be duly heard. Workshops or citizen advisory committees and juries can be held to vet the issues involved. These strategies can counter imbalances in political power.

Second, regulatory agencies must assess the cumulative impacts of pollution from multiple sources. Traditional chemical-by-chemical and facility-by-facility regulation does not sufficiently protect public health, because people come into contact with numerous pollutants where they live, work and play, and the interactions among those pollutants can be significant. We need to assess exposures and health risks holistically.

Third, the precautionary principle must be integrated into environmental regulation and enforcement. The principle holds that regulators should take action if scientific evidence strongly suggests but does not yet fully prove that a production facility



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or pollutant may jeopardize public health. All too often, in the never-ending quest for unequivocal proof of cause and effect, the environmental regulation process loses sight of a basic public health purpose: disease prevention. Fortunately, states have begun to implement precautionary policies. The Toxics Use Reduction Act in Massachusetts requires companies to identify ways to reduce waste and toxic emissions. Since the act's passage in 1989, firms have reduced toxic chemical emissions by 91 percent—and by some accounts saved them \$15 million.

The cumulative impact and precautionary principle recommendations are politically controversial. The Obama administration can take the lead, however, by encouraging federal, state and local agencies to integrate ideas of equity and precaution into programs and policies. For one, the current fiscal crisis presents the U.S. with an unprecedented opportunity to wean itself off fossil fuels—whether implicated in coal mining on Native American lands, congested freeways running through inner cities, or refineries sited along the fence lines of poor neighborhoods. Federal and state governments can also invest in solutions that ease social stressors, such as stimulating green jobs. By connecting social justice with economic development and sustainability goals, such a Green New Deal would go a long way toward dismantling the fundamental causes of environmental health inequalities.

**Regulators must assess cumulative health threats in low-income areas.**