

## Cry for Help

The U.S. Head Start preschool program is being forced to confront problems it was never designed to deal with—widespread and serious emotional and behavioral problems in small children, says a panel of the National Research Council. It's all part of a larger picture in which too many children's emotional needs are not being met by parents, preschools, and policy-makers, the group said in a report\* issued last week.

The committee, chaired by Jack Shonkoff of Brandeis University in Waltham, Massachusetts, said at a 3 October press briefing in Washington, D.C., that the explosion of research on early child development is having little effect on children's lives. While research has shown that there are no



Kids like these Head Start tots need more emotional support.

proven remedies for making children smarter, the report says much can be done toward a more important end: nurturing their emotional health. Nonetheless, "many early child care and education programs fail to apply such knowledge in their everyday dealings with children." Low average pay for day-care-center workers—at \$6.12 an hour, slightly less than that for parking lot atten-

dants—has led to a 30% annual turnover rate. This, says the panel, is despite "the overwhelming scientific evidence of the central importance of early relationships" with caregivers.

"We have a huge body of science that somehow doesn't seem to be listened to" by policy-makers, lamented Shonkoff. And the problems are getting ever more pressing. At a recent workshop, he notes, directors of Head Start programs complained they were "overwhelmed with mental health problems that they have no expertise to deal with"—problems that have worsened over the past decade, as levels of mental illness and drug abuse have risen among young mothers.

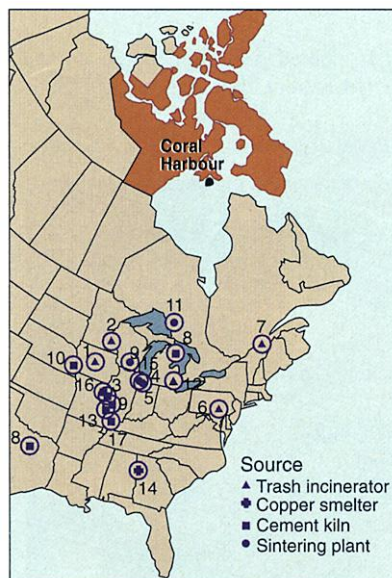
\* From *Neurons to Neighborhoods: The Science of Early Childhood Development* is online at [national-academies.org/webextra/neurons](http://national-academies.org/webextra/neurons)

## No-Show Showdown

A long-awaited U.S. Senate showdown over stem cell research was abruptly derailed last month. Now participants will have to start all over again in a new Congress next year.

For nearly a year, Senator Arlen Specter (R-PA) has been preparing for a full-tilt rhetorical joust with supporters of a federal ban on funding research using stem cells extracted from human embryos slated to be discarded by fertility clinics. Specter believes that the cells, which might someday be coaxed to grow into a wide range of tissues, will be key to treating many diseases, and he has pushed for an end to the ban. Last year, his effort to smash the ban threatened to produce legislative gridlock, so he put his crusade on hold in exchange for a promise from Senate Majority Leader Trent Lott (R-MS) to hold a full-scale public debate.

Lott, however, proved unable to deliver on his pledge: When he tried to bring Specter's bill to the floor on 28 September, Senator Sam Brownback (R-KS) pounced, invoking rules that allow a single lawmaker to block debate. Lott promised a disappointed Specter to try again next year. "I am sure it will be a good debate," he said, "whenever and wherever it is debated."



## Dioxin Routes Mapped

Just a handful of incinerators and factories in the United States spew much of the dioxin that contaminates people in Nunavut, Canada, thousands of kilometers to the north, a new study suggests. The study is the first to track dioxin pollution in the Arctic to specific sources in North America.

Dioxins and related industrial chemicals are carried by weather patterns to polar waters, where they wind up in the fat of animals via the marine food chain. Arctic Inuits who eat dioxin-tainted whales, seals, and fish may suffer health problems such as immune dysfunction, cancer, and developmental delays, say researchers.

To pinpoint where the stuff comes from, a team led by Barry Commoner of Queens College in New York City collected U.S., Canadian, and Mexican government data from 1996 and 1997 that identify 44,000 dioxin sources from urban incinerators to backyard trash fires. The researchers then plugged their data into a National Oceanic and Atmospheric Administration

(NOAA) weather model that could predict the paths of dioxin puffs over the course of a year. They found that a small fraction of sources accounted for most of the dioxin measured at eight sites in Nunavut territory. More than one-third of the dioxin found at Coral Harbour, for instance, came from just 19 sources, such as incinerators and iron-works in Iowa, Minnesota, and Indiana (see map).

"This work is mighty new," says Richard Artz of NOAA's Air Resources Laboratory. Similar studies have tracked acid rain in the northeastern United States to Midwest power plants, Artz says, but they have not been able to pinpoint specific sources. The results may influence negotiations over an international treaty to curb persistent organic pollutants, scheduled to finish later this year.

## Gaia Guru Goads Greens

"Their hearts are very much in the right place, but they often get the science wrong. ... Fifty years ahead when the problems of the greenhouse effect really hit us hard, somebody is going to point a finger back at the Greens and say: 'If we had nuclear power we wouldn't be in this mess now, and whose fault was it? It was theirs.'"

The 28 September *Independent*, quoting Greens hero James Lovelock, who collected early evidence that industrial chemicals were altering the atmosphere. His autobiography, *Homage to Gaia: The Life of an Independent Scientist*, was published last month.