prevention programs abroad, but spending for domestic prevention efforts dropped 19 percent in inflation-adjusted terms from 2002 to 2007.

Julie Davids, executive director of the Community H.I.V./AIDS Mobilization Project, a national advocacy group, said it planned to protest Tuesday in front of the C.D.C. headquarters in Atlanta to demand that the agency release the new figures and step up prevention efforts. "We don't know whether infection rates are rising or they've just been higher than we thought," Ms. Davids said. "But either way, this shows that prevention efforts are insufficient."

Doctors and states are required to report cases of full-blown AIDS, but only some states report positive results on tests for H.I.V. infection to the agency. It takes years for someone who is infected to develop symptoms; many people have been infected for years before they are tested.

Under the C.D.C.'s new surveillance system, 19 states and cities are performing two different blood tests of H.I.V. antibodies — the first indication of an infection. One test is highly sensitive and is able to spot an infection even in its earliest months. The other test is cruder, and patients must nurse an infection for many months before it can be identified with this test.

When a blood sample receives a positive result on the first test and a negative result on the second, officials have decided that this person was probably infected recently. By adding up these mixed results and projecting them across the country, the agency is able to come up with an estimate for new infections.

The agency sent out a letter to scientists on Nov. 26 describing the new system and urging patience as the numbers are reviewed.

Donald G. McNeil Jr. contributed reporting from New York.

Do not forget the Neediest!

NYT 12/2/07

Algae Emerges as a Potential Fuel Source

ST. PAUL, Dec. 1 (AP) — The 16 big flasks of bubbling bright green liquids in Roger Ruan's laboratory at the University of Minnesota are part of a new boom in renewable energy research.

Driven by renewed investment as oil prices push $100 a barrel, Dr. Ruan and scores of scientists around the world are racing to turn algae into a commercially viable energy source.

Some algae is as much as 50 percent oil that can be converted into biodiesel or jet fuel. The biggest challenge is cutting the cost of production, which by one Defense Department estimate is running more than $20 a gallon.

"If you can get algae oils down below $2 a gallon, then you'll be where you need to be," said Jennifer Holmgren, director of the renewable fuels unit of UOP, an energy subsidiary of Honeywell International. "And there's a lot of people who think you can."

Researchers are trying to figure out how to grow enough of the right strains of algae and how to extract the oil most efficiently. Over the past two years they have received more money from governments, the Pentagon, big oil companies, utilities and venture capital firms.

The federal government halted its main algae research program nearly a decade ago, but technology has advanced and oil prices have climbed since then, and an Energy Department laboratory announced in late October that it was partnering with Chevron, the second-largest American oil company, in the hunt for better strains of algae.

"It's not backyard inventors at this point at all," said George Douglas, a spokesman for the National Renewable Energy Laboratory, an arm of the Energy Department. "It's folks with experience to move it forward."

A New Zealand company demonstrated a Range Rover powered by an algae biodiesel blend last year, but experts say algae will not be commercially viable for many years. Dr. Ruan said demonstration plants could be built within a few years.

Converting algae oil into biodiesel uses the same process that turns vegetable oils into biodiesel. But the cost of producing algae oil is hard to pin down because nobody is running the process start to finish other than in a laboratory, Mr. Douglas said.

If the price of production can be reduced, the advantages of algae include the fact that it grows much faster and in less space than conventional energy crops. An acre of corn can produce about 20 gallons of oil per year, Dr. Ruan said, compared with a possible 15,000 gallons of oil per acre of algae.

An algae farm could be located almost anywhere. It would not require converting cropland from food production to energy production. It could use sea water and could consume pollutants from sewage and power plants.

The Pentagon's research arm, the Defense Advanced Research Projects Agency, is financing research into producing jet fuel from plants, including algae. The agency is already working with the Honeywell subsidiary, General Electric and the University of North Dakota. In November, it requested additional research proposals.

San Francisco Fleet Is All Biodiesel

By CAROLYN MARSHALL

SAN FRANCISCO, Nov. 30 — Claiming it now has the largest green fleet in the nation, the city of San Francisco this week completed a yearlong project to convert its entire array of diesel vehicles — from ambulances to street sweepers — to biodiesel, a clean-burning and renewable fuel that holds promise for helping to reduce greenhouse gases.

Using virgin soy oil bought from producers in the Midwest, officials said that as of Friday, all of the city's 1,500 diesel vehicles were powered with the environmentally friendlier fuel, intended to sharply reduce toxic diesel exhaust linked to a higher risk of asthma and premature death.

"Just like secondhand smoke, diesel is one of the worst things we can breathe," said the city's clean vehicle manager, Vandana Bali of the Department of the Environment.

The announcement came without fanfare from Mayor Gavin Newsom's office late Thursday, even as Congressional lawmakers dickered over the particulars of an energy bill that would give automakers incentives to produce cars that burn biofuels.

Ms. Bali said the city's diesel vehicles now all used a fuel known as B20, a mix of 20 percent soy-based biofuel and 80 percent petroleum diesel fuel, which reduces toxic emissions of carbon monoxide, hydrocarbons and other pollutants that lead to global warming.

A spokesman for the mayor, Nathan Ballard, said the goal was to cut such emissions to 20 percent below 1990 levels by 2012.

In November, Mr. Newsom announced a new project called SFGreasecycle, a program to collect fats and cooking oils from restaurants, at no charge.

"We are collecting grease," Mr. Ballard said. "Waste fats and oils are a major source of backup in our sewage system. But we're taking the grease that would have gone down the drain and turning it into biodiesel."