

a breast-feeding population, it's more difficult to determine efficacy because researchers have to follow the infants for more than a year to make sure that they have not become infected through their mother's milk. To assess the effect of breast-feeding, the CDC plans to stage a similar trial next spring in Thailand, where HIV-infected women routinely use infant formula.

Northern Thailand could also be the site for a hotly debated efficacy study that has been proposed by epidemiologist Marc Lallémand and co-workers at the Harvard School of Public Health, but not yet funded. This trial has stirred controversy because it calls for using the 076 protocol, rather than a placebo, as a control. Lallémand, who is collaborating with 30 Thai physicians under the aegis of Thai officials, defends using 076 as a control because AZT is available to some Thais. He also contends that the trial, which will test four different strategies with 1500 women, will arrive at a more meaningful conclusion. "The real question is, Is [the shorter regimen] going to work less well or as well as 076," Lallémand says. He submitted a grant proposal for this study to the National Institutes of Health last year and hopes to hear a decision in the next few weeks.

And that doesn't exhaust the list of mother-infant AZT trials now on the draw-

ing board. An ambitious mother-infant intervention, involving 1900 women near or in labor, is being planned at the WHO's Global Programme on AIDS. In that trial, scientists hope to cut the dose of drug and simultaneously increase its potency by exploiting a recent finding that AZT is much better at reducing the amount of HIV in a person if it is combined with the experimental anti-HIV drug 3TC. WHO is planning AZT/3TC tests in Uganda, Tanzania, and South Africa. "If the trial is conducted well, we hope to have scientific answers in 3 or 4 years," says Joseph Saba of WHO's Global Programme on AIDS.

#### Backs to the future?

It doesn't take a crystal ball to see that even if positive results come from some of the clutch of AZT trials now gaining momentum, women in developing countries will still have great difficulty getting drugs to stop HIV from reaching their babies. As a review article on perinatal HIV transmission in the May issue of the journal *AIDS* notes, some countries spend \$2 a year per capita on health care—roughly the retail price of two AZT capsules in the United States.

Saba says WHO scientists have spoken to representatives of Glaxo Wellcome, maker of AZT and 3TC, about providing those

drugs to pregnant women in developing countries if the planned trials pan out. "We don't need to tell them, 'You need to make [the drugs] more affordable,'" says Saba, who notes that the company is donating the drugs for the WHO trials. "The idea is to work with them." Harvard's Lallémand believes this problem could solve itself when researchers show that shorter regimens work. "The only way for us to lobby for change is 'Let's do it, show it works, and put people in front of their responsibility,'" says Lallémand.

Andrew Revell, project manager for AZT at Wellcome, says providing anti-HIV drugs to developing countries is a familiar quandary for the company that is put in "sharper focus" by 076. "This is a terribly difficult issue," says Revell. "This really does require special thinking, [but] I very much doubt that it will be Glaxo Wellcome giving away unlimited amounts of AZT."

Given that reality, if researchers, government officials, public health advocates, and Glaxo Wellcome don't reach consensus soon, in a few years developing countries may find themselves in a situation that mirrors the problem in the poster that will soon appear in magazines in the rich countries: Watching babies die of AIDS and knowing they didn't have to.

—Jon Cohen

## ENERGY RESEARCH

### Senate Targets Fusion, Backs NIF

"It's a dismantlement budget," said one senior Department of Energy (DOE) official about the latest bad news fusion researchers are getting from Capitol Hill. The Senate Appropriations Committee last week approved a budget for the fusion program even lower than the drastically reduced level the House approved earlier in July. In its DOE appropriations bill, the panel slashed fusion funding to \$225 million—\$4 million less than the House level and far below the \$373 million the department is spending in 1995. That's also less than the \$320 million that a White House advisory panel recently recommended as the bare minimum to keep a viable program.

The constricted fusion budget approved by the Senate panel would allow continued work on the International Thermonuclear Experimental Reactor (ITER), an international effort to build a huge tokamak. But it would halt plans for a U.S. experiment that had been planned as a steppingstone to ITER, the Tokamak Physics Experiment at Princeton Laboratory. "The promise of fusion energy can only be realized through international collaboration," the bill's report states.

Amid that gloomy news for fusion re-

searchers there was one bright spot: The Senate bill, which also includes funding for other DOE science projects, allots money to start work on the National Ignition Facility (NIF), a \$2 billion laser project at Lawrence Livermore National Laboratory in California designed to trigger miniature fusion explosions in pellets of hydrogen isotopes. The House rejected NIF last month as too costly, but the Senate bill would provide the entire \$37.4 million down payment the Clinton Administration requested for the project.

The football stadium-sized facility, which would help ensure the future of the Livermore lab, would provide an alternative to full-scale tests for the nuclear weapons program. At the same time, it could be used for experiments in inertial confinement fusion, an alternative route to fusion energy. Until now, the focus of the U.S. fusion effort has been on magnetic confinement of hot plasmas in tokamaks.

In nonfusion business, the committee called for DOE to conduct a competition for the site of a new neutron source facility. DOE and House lawmakers want the proposed facility to be built at the Oak Ridge National Laboratory in Tennessee, but the

Senate panel says Argonne, Brookhaven, and Los Alamos National Laboratories should be added to the list of candidate sites. The DOE bill provides \$8 million to study the new facility, which would be a more modest version of the Advanced Neutron Source the Administration abandoned earlier this year as too expensive (*Science*, 17 February, p. 952).

And in spite of the harsh news for fusion, the Senate committee did find money to provide both Democrats and Republicans with pork projects. The panel set aside \$500,000, for example, for an education initiative in Louisiana, to be supported by Livermore and New Mexico's Sandia National Laboratory. Louisiana is home to Senator Bennett Johnston (D), the former chair of the subcommittee and now its ranking member. And Oregon, home state of Senate Appropriations Committee Chair Mark Hatfield (R), would receive \$8.5 million from DOE's energy research budget for development of a high-speed computer network for the Oregon Health Science University.

The Senate is expected to debate the DOE bill this week, before Congress begins its August recess. A committee of representatives and senators will sit down in September to iron out a single version to send to President Bill Clinton.

—Andrew Lawler

