

Line item cut threatens monitoring of more than West Nile virus

Dengue fever is lapping at America's shores. In early August, Florida's Department of Health confirmed that there had been 96 cases of the mosquito-borne disease in the state since the start of the year. More distressing was that 29 of those who fell sick contracted dengue locally. The mosquito-borne disease has established a firm foothold in Puerto Rico, with 1,000 cases reported by late July in that US territory alone.

Puerto Rico is home to a Centers for Disease Control and Prevention (CDC) monitoring station—which not only is responsible for tracking dengue in the United States but also serves as a World Health Organization reference lab for the entire Caribbean region. Yet the facility's future is uncertain.

In February, President Barack Obama released his budget proposal for the 2011 fiscal year, jump-starting the budgeting process that then proceeds to the US Congress. One of the cuts in Obama's version included the elimination of a legislative line item representing \$26.7 million in funding for the CDC's Division of Vector Borne Infectious Diseases (DVBID), which tracks the spread of infections transmitted through mosquitoes, ticks, fleas and other animals. The lost funds represent more than half of the division's total budget, which in 2010 was about \$41 million.

"It's potentially shortsighted, since vector-borne diseases sicken tens of thousands of Americans each year," says Edward Ryan, president of the American Society of Tropical Medicine and Hygiene. His organization has been urging members of Congress to restore the funds.

Meg Reilly, a press officer for the Office of Management and Budget—the Cabinet office



Spray away: Mosquito control in Florida.

Joe Raelle

involved in putting the president's budget proposal together—told *Nature Medicine* the funding cut represents a program "initially created in 2003 to streamline reporting of West Nile Virus. The goals of this program have been met."

Here's where it gets a little complicated. Initially, as the OMB says, that \$26.7 million was appropriated just for West Nile monitoring. That's perhaps not surprising given the wide media coverage of the virus' influx in the US during the early part of the last decade. The DVBID instigated a massive campaign encouraging local health officials to collect information on West Nile cases and to test mosquitoes and dead animals for the presence of the virus. The information was collated in a monitoring system called ArboNET, which is now used to monitor a range of insect-transmitted diseases.

In 2009, Congress freed the funds to be used for monitoring all kinds of vector-borne infections, a category that includes Lyme disease, Rocky Mountain spotted fever and dengue—all on the rise. However, the line item on the CDC's

budget still included language referring to West Nile virus, leading some to speculate that the OMB didn't exactly understand what the budget item that it was eliminating was for.

"We can't speak to whether there was confusion associated with the change," says Ron Rosenberg, the associate director of the DVBID. Rosenberg adds that the CDC supports the president's budget proposal.

However, while Obama's budget adds an extra \$18.9 million to be used by the CDC for emerging infectious diseases, vector-borne diseases are only a portion of what falls under that umbrella. The DVBID would be competing with programs in SARS, influenza and other non-vector-borne illnesses.

Experts note that dengue isn't the only mosquito-borne virus causing concern. This year, Eastern equine encephalitis, which has a mortality rate of 33%, has cropped up in Florida, Massachusetts and Michigan. In the latter two states, the disease has been confined to horses, but as *Nature Medicine* went to press, four human deaths had been reported in Florida this summer.

The final federal budget still has to be wrangled through both houses of Congress, which could take months. But there is hope. The Senate Appropriations Committee restored the entire \$26.7 million when it released its report at the beginning of August, saying that eliminating funds for vector-borne disease would be "irresponsible."

Full details from the Appropriations Committee of the House of Representatives won't be available until the full committee meets later this year.

Roxanne Palmer

China to scale up collaborations in infectious disease research

The Chinese Center for Disease Control and Prevention (CCDC) has signed an agreement with the TDR, a joint UN-World Health Organization program, to drive the center's medical research toward better understanding infectious disease in developing nations, particularly in Africa. The memorandum of understanding was signed in Shanghai on 14 June, the closing day of a symposium dedicated to the research and control of infectious diseases of poverty.

Chinese scientists have already made a notable contribution to international research in malaria with their work on *Artemisia annua*, a traditional herb that now serves as the foundation of most malaria

treatment programs worldwide in the form of artemisinin-based drugs.

As a special program for tackling tropical diseases, TDR has offered grants to support medical research in countries such as China since 1979. The memorandum of understanding with the CCDC will accelerate discovery as it "provides a broad framework agreement for cooperation," according to Robert Ridley, director of TDR.

"As China transitions into its new international role and scales up its international development efforts there is great value in maintaining a focus both on infectious diseases of poverty and on research for health and development," he says. "This twin focus can empower developing-

country research institutions to play a more pivotal leadership role in supporting broader development-orientated programs."

Since signing the agreement, TDR has sent African researchers to the National Center for Drug Screening in Shanghai to work together on potential new drug candidates against diseases such as malaria, tuberculosis and sleeping sickness.

"This is a new model," Ming-Wei Wang, director of the Shanghai center, said in a statement on TDR's website. "We are trying to create a new mechanism, a collaboration not only at the multinational level but with different partners."

Nayanah Siva