CLINICAL CAPSULES

New Mexico Boy Contracts Plague

Bubonic plague was confirmed in a teenaged boy in July, according to the New Mexico Department of Health. This was the first known human case of plague in New Mexico this year; no cases occurred in 2004 and one case occurred in 2003.

At press time, the teenager was expected to return home after several days in the hospital. He was treated with gentamicin and should recover fully without complications, according to Paul Ettestad, D.V.M., New Mexico's public health veterinarian. Rodent burrows and the bodies of several

rock squirrels who had apparently died of plague were found near the boy's semi-rural home. "Rock squirrels and their fleas are the number one source of plague in New Mexico," Dr. Ettestad said.

Although plague is primarily a bacterial disease of rodents, it can jump to humans by way of bites from infected fleas, or by direct contact with infected animals, including pets and wildlife. Symptoms include fever, chills, and painful and swollen lymph nodes in the neck, armpit, or groin. Some patients also suffer from headaches, vomiting, and diarrhea.

Syringe Exchange Programs

In 2002, the number of syringe exchange programs in the United States, the number of states with such programs, and public funding for the programs decreased for the first time in 8 years, according to the Centers for Disease Control and Prevention.

A survey showed a 5% decline in the number of programs between 2000 and 2002 (from 154 to 148), a 9% decline in the number of states with such programs (from 35 to 32), and an 18% decrease in public funding (from \$9 million to \$7 million). Yet the number of syringes exchanged increased 10%, from 23 million

to 25 million, and total budgets from public and private funds increased 7%, from \$12 million to \$13 million.

The findings suggest that some programs became more efficient over time while others were unable to maintain operations. But this trend may be changing; as of June 2004, there were 184 known programs operating in 36 states (MMWR 2005;54:273-6).

Continued monitoring of syringe exchange programs is important for evaluating the effects of the public health interventions these programs provide. These often include health and social services to injection drug users who might otherwise not be reached and removal of syringes potentially contaminated with HIV and other infections, according to the CDC.

Generic AIDS Drugs

The U.S. Food and Drug Administration has tentatively approved generic versions of three AIDS drugs under the President's Emergency Plan for AIDS Relief, according to an FDA statement.

Two applications for generic versions of Viramune (nevirapine) and one each for generic versions of Retrovir (zidovudine) and Sustiva (efavirenz) were granted the tentative approval. This means that although existing patents and/or exclusivity prevent marketing in the United States, the products meet FDA quality, safety, and efficacy standards and are eligible for purchase and use outside the United States.

The President's Emergency Plan for AIDS Relief is providing \$15 billion in the fight against HIV and AIDS, particularly in the hardest-hit countries. These tentative drug approvals aim to make safe, effective treatment available through the Plan as quickly as possible, according to the FDA.

Lymphatic Filariasis Treatment

An 8-week course of doxycycline was highly effective against lymphatic filariasis caused by *Wuchereria bancrofti* in a randomized, placebo-controlled trial.

This novel approach to the treatment of bancroftian filariasis, which is "one of the most common causes of global disability," was developed on the basis of the fact that the parasites depend on Wolbachia endosymbionts for survival, and antibiotic treatment has the potential to deplete this bacterium, reported Mark J. Taylor, Ph.D., of the Liverpool (England) School of Tropical Medicine and his colleagues.

Of 32 patients randomized to receive 200 mg/day of doxycycline, only 4 (13%) remained microfilaremia positive at 14-month follow-up, compared with 34 of 38 (90%) in the placebo group. Furthermore, only 6 of 27 patients in the doxycycline group who underwent ultrasound at 14 months' follow-up had adult worms detected, compared with 24 of 27 patients in the placebo group, the investigators found (Lancet 2005;365:2116-21).

The treatment was well tolerated, with only mild side effects. In an editorial, Wilma A. Stolk of Erasmus University Medical Center Rotterdam (the Netherlands) and her colleagues wrote that anti-Wolbachia treatment has strong potential for controlling lymphatic filariasis. Research should focus on antibiotics practical for use in mass treatment, they recommended (Lancet 2005;365:2067-8).

—Sharon Worcester with staff reports

