Conquering TB in New York City

In 1992, the steadily increasing number of TB patients in New York City reached a crescendo: more than 3,800 new cases were reported, a figure not seen since the late 1960s, before the city began pumping money in a massive TB eradication effort. During the intervening quarter-century, however, TB funding had been slashed, homelessness soared and growing numbers of AIDS patients contracted the disease. And unlike in the past, a third of the cases were resistant to at least one drug.

"We've always seen a fair amount of active TB at our hospital," said Regina Napolitano, RN, director of infection control for Coney Island Hospital in Brooklyn, New York. "But when it began to become drugresistant, it took on a different sense of urgency. In 1993 we began to recognize that TB was becoming resistant to almost every medicine we had to treat it."

New York City's Department of Health launched a mammoth public health campaign that year--a program that Napolitano calls "one of the most successful efforts ever in controlling an epidemic in a large city."

The number of cases has dropped each year, and by 1996, the number of new cases fell to 2,053. Even so, New York still had 3.5 times the national TB rate, and 5 percent of the cases were resistant to more than one drug, compared with two percent of the cases nationwide. In 1996, Coney Island Hospital reported 28 cases of TB, about 1.4 percent of the total for New York City. None was multiple drug-resistant.

Napolitano credits the turnaround in the TB crisis to the Health Department's multidisciplinary approach to the problem. A coalition of people who worked with TB patients--from nurses to prison administrators to homeless shelter directors--met to develop ways to meet the challenges presented by the influx of TB patients. Today, a cadre of public health workers regularly visits the homes of TB patients--including the doorways and underpasses where homeless people sleep--to make sure they are taking their medicine.

New York state also adopted guidelines issued by the CDC for prevention of transmission of multi-drug resistant TB. The guidelines include: upgrading of isolation rooms so they include negative ventilation to prevent airborne transmission, screening of all emergency room patients for TB, educating staff and patients about the disease, and equipping all hospital workers treating patients with TB with special air-tight facial masks.

"We're no longer seeing mainly HIV-positive people with TB at Coney Island Hospital. It's now patients from countries where TB is prevalent, such as India, Pakistan and Korea, and, to some extent, Russia," Napolitano said. "But we've gained the experience in preventing and treating the disease and so we have a system in place to make sure we can control TB."