

Medical sleuth tracked AIDS early: Virus battle enters third decade

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Houston --- The ward on the first floor of the Thomas Street AIDS Clinic is empty, and very quiet. The monitors beside the beds that would beep out patients' pulse rates have been turned off for lack of use. Over the hum of the air conditioning, you can hear cicadas thrumming in the oleander bushes outside.

"Five years ago, these beds would all have been full," said Dr. Wayne Shandera, a clinic volunteer.

The empty room is a sign of progress in the struggle against AIDS: The HIV-positive poor and homeless who use this county-owned clinic on Houston's ungentrified north side are well enough not to need its facilities for emergency care. But the patients who wait upstairs for Shandera's office hours demonstrate how uneven that progress has been: For each one who manages a complex drug regimen without mistakes or side effects, there are several whose infection resists whatever medicine can do.

"We know so much about HIV, more than about any other pathogen," said the stocky, wiry-haired physician. "And yet we still don't have a complete understanding of how it does what it does."

Shandera is uniquely placed to know what HIV research has accomplished, and how much there is yet to do. Two decades ago, as a young field officer with the Centers for Disease Control and Prevention, he wrote a small article for the CDC's weekly news bulletin. It was barely two pages long, about a few cases of unexplained illness on the other side of the country. But it heralded enormous changes: in the CDC's mission, in American society and in the lives of millions.

Shandera's article, published 20 years ago today, was the first description of the first cases of what would come to be known as AIDS.

"In the period October 1980–May 1981, five young men, all active homosexuals, were treated for biopsy-confirmed *Pneumocystis carinii* pneumonia at three different hospitals in Los Angeles, Calif. Two of the patients died. Case reports of these patients follow . . ."

--- Morbidity and Mortality Weekly Report, CDC, June 5, 1981

Today, Wayne Shandera is an assistant professor of internal medicine at Baylor College of Medicine in Houston and supervises residents at Ben Taub Hospital downtown. But in 1981, he had just arrived in Los Angeles, reluctantly.

Shandera was a newly named officer in the Epidemic Intelligence Service, the front-line corps of disease detection that the CDC dispatches to outbreaks. His credentials were excellent: He had done pre-med at Rice University in Houston, medical school at Johns Hopkins in Baltimore and residency in internal medicine at Stanford University in California.

He hoped for an assignment in the South, somewhere with interesting infectious diseases and easy access to an airport: He had left a budding relationship in Baltimore, and his father was dying of colon cancer in San Antonio. To his dismay, he was assigned in the summer of 1980 to the Los Angeles County health department.

"The attending physician at Stanford said, 'Oh, you're just going to be tracking down a lot of sexually transmitted disease cases,' " he recalled. "But I remember thinking, I'll try it for a year, and if it doesn't work, I'll ask to be reassigned to Atlanta."

The work proved more interesting than he thought. There was a cluster of miscarriages in Long Beach, an outbreak of a rare neurological condition in Santa Monica, an attack of bacterial diarrhea that stretched county-wide. And there was a friend from residency: Dr. Michael Gottlieb, several years ahead of Shandera at Stanford, had joined the immunology faculty at the University of California-Los Angeles.

"We talked about projects we could work on together, something that we could write up," Shandera said. "Something that connected infectious disease with immunology."

Nothing surfaced, though. Shandera began to worry that the L.A. assignment wasn't teaching him enough. He asked the CDC to let him spend his second EIS year in Atlanta; he would leave Los Angeles in July 1981. Then Gottlieb called. Three young men at his hospital, and one at another institution downtown, had been diagnosed with a bizarre pneumonia to which they should have been immune.

"The patients did not know each other and had no known common contacts or knowledge of sexual partners who had had similar illnesses. The five did not have comparable histories of sexually transmitted disease. Two of the five reported having frequent homosexual contacts . . . All five reported using inhalant drugs . . ."

The patients Gottlieb cited were infected with *Pneumocystis carinii*, a fungus that had multiplied until it blocked the air space in their lungs. They were desperately sick, wasted and struggling for breath, with a blue tinge to their skin. The puzzle was why: People usually developed *Pneumocystis carinii* pneumonia, PCP for short, only when their immune systems had been undermined --- by cancer chemotherapy, for instance.

None of the patients Gottlieb had found had been treated recently for cancer, but their immune systems were definitely not normal. They were also infected with cytomegalovirus, a type of herpes. For Shandera, their condition rang a bell.

"Throughout that year, the grapevine kept saying that something unusual was happening in homosexual men," he recalled. "The epidemiologists heard that something unexplained was occurring in the San Fernando Valley, the San Gabriel Valley. And a lymphoma pathologist at University of Southern California had called us; he had something as well."

Then a new report arrived on his desk: A 29-year-old man in Santa Monica had been diagnosed with cytomegalovirus. Shandera went to investigate. He found the man in an intensive care unit, and his lover in the waiting room. This patient had the same unexplained infections --- and like the men in Los Angeles, he was a homosexual.

"When we realized we had five cases, we thought we were dealing with something distinctly different and unusual, and it needed to come out," Shandera said.

He and Gottlieb wrote a short paper describing the cases and dictated it by phone to the editor of the Morbidity and Mortality Weekly Report, a roundup of death and disease that CDC releases every Thursday. It was published June 5, 1981.

It listed six doctors who contributed: Gottlieb and four colleagues from UCLA, and a physician from Cedars-Sinai Hospital in Los Angeles. By CDC tradition, Shandera's name was not included; he was referred to only as "Field Services Division, Epidemiology Program Office, CDC."

Many other papers would follow. But the report remains the first official notice of a disease that would kill 448,000 Americans and nearly 22 million people around the world.

"The fact that these patients were all homosexuals suggests an association (with) some aspect of a homosexual lifestyle or disease acquired through sexual contact. . . ."

Many of the physicians associated with the paper went on to relative fame. Gottlieb was Rock Hudson's doctor; when he announced to a 1985 press conference that the movie star was dying of AIDS, he forced the epidemic into the awareness of mainstream America. David Ho, a resident at Cedars-Sinai when the fourth case was discovered, was TIME's Man of the Year in 1996; he developed the multidrug therapies that have allowed AIDS patients to live longer.

Shandera did not become famous. He did not even become an AIDS doctor for several more years. A month after the article was published, he returned to Atlanta. "It tore me up to leave," he said. "I had developed a lot of feelings for what was going on in L.A."

"We suspected, almost as soon as we published the paper, that the outbreak was bigger than we thought," Shandera said. "Though we had no idea how big it would turn out to be."

He finished his stint at CDC, did a postgraduate fellowship and tried private practice. The AIDS epidemic had taken off; by 1987, more than 20,000 Americans had died, and Shandera felt a calling to return to HIV work. He helped open the first AIDS clinic at Parkland, Dallas' big public hospital.

"We were on edge and emotional all the time," he said. "So many people were dying." In 1988, he came to Ben Taub in Houston to specialize in infectious disease.

Shandera is single and lives in a neighborhood of old bungalows owned by young university families. An observant Catholic who plays the pipe organ for fun, he spends part of his vacations administering medical care at missions in Guatemala. The trips have left him appreciative of the success of treatment in America, but aware of what might happen if AIDS continues to spread in the developing world.

"Remember, we only account for 5 percent of the world's cases," he said. "There is such a gap between the sophisticated science and what goes on at the local level in most of the rest of the world." Outside the world of AIDS science, few people know of Shandera's contribution to the study of the epidemic; his students at Baylor this semester had no idea of his history. Like thousands of CDC personnel who have investigated an outbreak, solved it and been dispatched to investigate another, he has remained essentially anonymous.

He is quite content that this be so.

"I played such a bit part," he said. "I happened to be there, and it fell to me to see the first cases, but so many people have done so much amazing work since."

"None of us can solve this epidemic on our own," he added. "We can only do what we can in the arenas that we are assigned, and hope."