



Shepherds and their children help visiting scientists in search for infection-spreading local rodents, which live in deep burrows.

Village of Peace — and Horror

French team studies Iranian town where bubonic plague killed 42 in a few days

In the U.S., plague appears to be an anachronism. But in Iran's vast, semidesert region of Kurdistan, the disease is a major problem. So much so that the desert town of Aghbolagh Morshed is known as "the village of the plague."

It got this name in 1957, when 42 people died in a few days as a result of an epidemic. In response, researchers from the Pasteur Institute in Paris set up a laboratory in the Iranian town. And for the past eight years, they have been making an intensive survey of biological, social, and climatic factors that influence the propagation of plague.

The researchers, headed by Prof. Marcel Baltazard, found that plague is carried by gerbils, burrowing rodents about the size of a small rabbit.

The persistence of the disease often depends on a balance between resistant and susceptible species. Fleas migrate from dead or dying animals to the resistant species. Although immune to plague, gerbils are ideal carriers for infected fleas. They live in deep burrows and provide a "silent" reservoir of infection. Plague outbreaks can be initiated by a chance infection picked up in a field.

Having established the epidemiologic cause, researchers faced a problem when they found plague in areas where the absence of bacilli in rodents and their fleas had been painstakingly verified. Then a scientist at the Pasteur Institute in Paris demonstrated that *Pasteurella pestis* survives in soil. Professor Baltazard's team set out to confirm this fact by collecting soil samples from plague areas.

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