

Health and Safety

Of Mice and Men

When a mysterious illness began claiming the lives of young Navajos last spring, tribal elders blamed the deaths on the tendency of young generations to drift away from traditional beliefs. It looks like they were right.

After several months of exhaustive field research and laboratory analysis, the Center for Disease Control finally identified the cause of the disease as a previously unknown pathogen, called a hantavirus. These viruses are known to be earned by rodents and spread through their droppings, the dust of which becomes airborne in the arid Southwest. Unlike other infectious ailments, hantaviral diseases tend to strike young, healthy adults rather than small children and the elderly. Although hantavirus-caused diseases are common in Asia and parts of Europe, they were previously unknown in America - or were they?

Contact with mice has always been prohibited in Navajo culture because they are thought to have dangerous powers. They must be kept out of houses and away from food and, if a mouse so much as touches your clothes, the garments must be burned. "The mouse is the only rodent that Navajos have this thing about," says Ben Muneta, a doctor and CDC-trained epidemiologist who works for the Indian Health Service. From a medicine woman in Monument Valley, Muneta learned that mice must never be touched or allowed in the home because they are bearers of illness from ancient times. "The illness spreads in the air," the medicine woman told him. "In a closed room, the power of the mouse would take over and destroy you if it got in your eyes or nose or mouth." She also told him that "the mouse would choose the strongest and best person in the house."

"It was an incredible feeling of discovery," Muneta recalls. "She was describing quite subtle aspects of the hantaviral infection process." He concluded that Navajos could have encountered

the hantavirus generations ago and, through observation, learned how to avoid it. "The traditional healers are also scientists with centuries of experience " he says. This fall, with his help, the Indian Health Service introduced a program that combines modern health education with traditional wisdom to teach people to protect themselves from the disease.

So, what does this mean to us - except not to inhale mouse droppings? The take-home lesson is to appreciate the value of direct observation and indirect experience. Those of us who are college-

educated are taught not to trust our senses, and that all facts must be verified by controlled experiments. While we all acknowledge the value of formal research, much useful information can be gained by careful observation. So, keep your eyes open while walking around your nursery and don't discount the experiences of your long-time workers.

Source: Grady, D. 1993. Death at the Corners. Discover 14(12): 83-91.