WASHINGTON (AP) — The willingness of young men to use guns spreads like a disease, or even a fashion fad, through urban neighborhoods, often causing youth to view firearms as essential to survival and status, a new study suggests.

Jeffrey Fagan, director of the Center for Violence Research and Prevention, said gun homicides among young men is a contagious impulse that becomes a powerful social current, forcing even violence-averse youth to grab a firearm.

“We found that guns become sort of a social toxin,” Fagan said Sunday at the national meeting of the American Association for the Advancement of Science. “Guns became a major influence on the way that one young man interacts with another.”

Fagan said firearms become status symbols, a central part of a violence theme that spreads like a fad from neighborhood to neighborhood.

“The presence of gun homicides in one neighborhood significantly increased the likelihood of gun homicide in any of the surrounding neighborhoods during the subsequent year,” Fagan said.

He based the conclusion on an analysis of the rise and fall of fatal shootings over many years in New York City.

In interviews with scores of young men in urban neighborhoods, Fagan said, he discovered that a gun, and the willingness to use it, can become a marker for a young man’s status in a community.

“Guns created an ecology of death,” he said. “All disputes become potentially lethal.” If a young man fails to carry a gun and then loses an argument, he slips in social status and becomes prey, a potential victim.

The young man’s reaction, for safety and to regain status, is often to start carrying a gun and to be ready to use it. And so the gun culture spreads, from youth to youth, until gun ownership has “eclipsed or devalued other identities,” Fagan said.

“Guns became part of their identity,” he said. “The decision to carry a gun was very strategic.”

But like a disease epidemic or a fashion fad, said Fagan, gun violence can fade, become stigmatized and socially unacceptable.

The study strongly suggests that a police focus on taking guns off the street can be a successful way to control crime and violence, he said.

Another speaker at the AAAS meeting said a 25 percent decline in national homicide rates among adults in the 1990s may be linked to society’s increased willingness to put people in prison and, ironically, to the decline in marriages.

Richard Rosenfeld, a professor of criminology at the University of Missouri, St. Louis, said his study suggests there also is a “civilizing influence” at work, creating a reduced tolerance for violence that includes increased respect for the victims of domestic crimes.

The U.S. incarceration rate was stable for 50 years, standing at about 110 people per 100,000 general population. Starting in 1973, society starting putting more people in prison for longer sentences. The incarceration rate is now 450 per 100,000.

By removing people from the street during the years that they were most prone to violence, the increased incarceration can be credited with about one-quarter of the decline in adult homicide rate, Rosenfeld said. The rate peaked at 16 per 100,000 population in 1980, dropped to 8.3 per 100,000 by 1995 and remains about there, he said.

But if the fall in homicide rate is linked to more crowded prisons, Rosenfeld said, it comes at a high price for society: A net increase of 670 prisoners a year yields one less homicide.

“When you multiply 670 times the $20,000 it costs to house one prisoner, you get $13.4 million,” he said. Society must decide “if that is too much to avert one homicide.”

The sharpest decline in the homicide rate has been in the category that includes spouses, family members and intimate partners, Rosenfeld said. One major reason for this is the decline in marriages, he suggested.

In addition, he said, “Cultural changes are reducing the tolerance for interpersonal violence.”