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Social Medicine

The isolation of modern life may be bad for your health

WHEN MOST PEOPLE hear that the flu or a cold is making the rounds, their first instinct is to hole up far from people and their sneezing, sniffing, and coughing. After all, it's common sense that being around others gives you a greater chance of catching a cold. But research also indicates that being around others—or at least having people to be around—can fend off colds. A 1997 Carnegie Mellon University study found that, when researchers sprayed the cold virus directly into subjects' noses, those with rich social networks were four times less likely to come down with the illness than those with few friends. That finding corroborated similar conclusions in several earlier studies. It also offered one more hint that modern society, with its tendencies toward rootlessness and isolation, may itself be a source of environmental harm.

Evidently, social networks protect against more than the common cold. According to dozens of studies over the past four decades, a tight community of friends and family correlates with a lower incidence of a range of ailments, from heart disease to Alzheimer's. A seminal 1979 nine-year study following residents of Alameda County, California, found that people who were more socially integrated lived longer than their less connected counterparts.

A 2005 study funded by the National Heart, Lung, and Blood Institute found that middle-aged women who have large social circles had a 23 percent lower incidence of coronary artery disease than those with small networks. And a 2000 Swedish study found that people older than eighty with poor social networks had a 60 percent higher chance of developing dementia.

The studies were designed to rule out healthy lifestyle behaviors as an explanation for the differences. And, while scientists say more research is needed to determine the extent to which personality is responsible for the positive correlation, the evidence appears to indicate that social connections can provide a health boost to anyone.

Those who volunteer or otherwise assist others may receive more health benefits than those who just socialize. An article in the June 2005 *International Journal of Behavioral Medicine* cites more than a dozen studies that link the act of helping others with mental and physical well-being. A 2003 study associated volunteering with significantly lower incidences of ulcers, diabetes, depression, and other major illnesses. In a 1999 study, people who volunteered for two or more organizations had a 63 percent lower likelihood of dying during the study

period than nonvolunteers, even factoring out the status of their health.

Stephen G. Post, a professor of bioethics at Case Western Reserve University in Cleveland and author of the *International Journal* article, says that volunteers get a "helper's high" that translates to better health, and that people who lend a hand usually have the kind of varied social networks touted by the health research.

But researchers are not sure how social affiliations or the "helper's high" translates to medical benefits. Some scientists believe it may be that loneliness causes chronic stress, weakening the immune system and causing the body to age faster. Such stress, one theory says, could indicate that the human body has simply not evolved for the isolation made possible in modern society.

Like other primates, humans are intensely social animals. Long-term studies of chimpanzees in Africa have found that members of a troupe virtually never choose to live alone—and if they're ostracized, they almost never survive. Over millions of years of hunting and gathering, and in the few remaining aboriginal societies, humans have banded together to obtain food and survive the exigencies of nature. Modern society, for all its benefits, has disrupted that balance.

"Ultimately the raw material for our humanity is rooted in natural processes," says Paul Faulstich, an associate professor of environmental studies at Pitzer College in Claremont, California. "As our connection to these natural processes breaks down, so do our relationships with each other. We've created a new reality that



doesn't require face-to-face interaction."

In the United States, social activities such as club membership, church attendance, and even picnicking have declined over the last five decades. Many of us spend hours each day alone in cars and live in neighborhoods with no sidewalks, which research shows narrows our social interactions. Our food may still come from a farmer, but we buy groceries with only a passing nod to the checker. We order many items online. We interact by e-mail. We sit in front of television sets instead of eating at family tables or having dinner parties.

"So much is done for us that we don't need people anymore," says David Sloan Wilson, a professor of evolutionary biology at Binghamton University in New York State and coauthor of the 1998 book *Unto Others: The Evolution and Psychology of Unselfish Behavior*. "It leads people to isolation."

Wilson is compiling research based on U.S. residents' own reports about how they spend their time and how they feel about it. The subjects, monitored in thirteen towns and cities around the country, carry electronic devices that beep at various times. The carriers must then write down where they are, what they're doing, who they're with, and how they're feeling.

"It's kind of sad, honestly," Wilson says. "It's not as if they have a bad life. It's

just very unconnected. They're most happy when they're with friends, but when they're with their friends, what are they doing? Watching TV. People are pretty lonely and can afford to be in our affluent society."

In the early 1990s, many people had high hopes that digital technologies would enable people from around the globe to connect and communicate. But no studies have sought to determine whether these virtual communities have the same powerful health effects as face-to-face contact, researchers say. That has not stopped many baby boomers of retirement age from moving to remote locations on the assumption that e-mail and other electronic communication would sustain their social networks, which instead often fray after the move.

And yet it's those social networks that characterize healthy communities. Perhaps the most famous example of this phenomenon is the town of Roseto, Pennsylvania, which caught epidemiologists' attention in the 1960s for its unusual rate of heart attacks among residents—less than half the rate of the neighboring towns, with which it shared the same water supply and hospital. Stewart Wolf and John Bruhn, the principal researchers of the now widely accepted "Roseto effect," found in a 1966

study—updated in 1992 by Wolf and others—that Rosetans' robust hearts did not correlate with such factors as genetics, tobacco use, or cholesterol levels, but with "mutual respect and cooperation."

In the town's golden age, residents of Roseto worked hard for a better life for their children, eschewed outward signs of wealth that would sharpen economic differences, and "radiated a kind of joyous team spirit as they celebrated religious festivals and family landmarks," Wolf and Bruhn wrote. Everything about Roseto's daily life reinforced community. Residents lived in three-generation households, ate rich Italian dinners together, had a reassuringly consistent weekly menu for those meals (Mondays, spinach-and-egg soup; Tuesdays, spaghetti), and lived in tightly packed neighborhoods, gathering with family and friends at social clubs or the fondly remembered *passeggiata*, or village stroll.

"You go down the street, and everybody says 'hello, hello,'" Anita Renna, then forty-three, told the *Chicago Tribune* in 1996. "You feel like you're the mayor."

But by then, Renna's treasured *passeggiata* and other rituals were in decline. New people had arrived with more isolated lifestyles, and many Rosetans themselves could afford suburban-style homes at the periphery of town. As social ties broke down over the years, heart attack rates in Roseto rose to conventional levels. "I'm sorry we moved," one recently suburbanized Rosetan was quoted as saying in the *Tribune*. "Everything is very modern here, very nice. I have everything I need here, except people." ❧