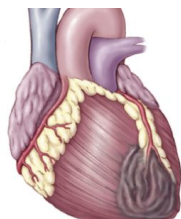


12 July 2006

By: Alexandra Lupu, Health News Editor



[Is the Risk of Heart Attack Lower during Summer?](#)

Even if winter is known as the critical season for heart attacks, strenuous activity and air pollution may as well lead to high rates of myocardial infarction during the hot season

Previous scientific studies showed that summer could be the season when heart attacks occur the least in individuals, as compared with the winter when the rate of heart attacks is believed to be the highest. For example, a research performed in August 2002 by a cardiologist at The Heart Institute from the Good Samaritan Hospital in Los Angeles found that heart attacks that occur during summer are less likely to be as many as the ones occurring in any other season of the year. Dr. Robert A. Kloner, research director of the Heart Institute in Los Angeles has carried out studies and reached the conclusion that "the size of a heart attack varies by season and is smallest in the summer," he says. The reasons that lower heart attack risks during summer may be related to the environmental temperature, because the heat in summer lowers the blood vessels that can carry a higher amount of blood and oxygen to the heart. Clotting factors, known as one of the main causes of heart attacks, are also lowered by warm temperatures. Another explanation could be connected to the fact that "the heart-attack rate is related to the number of hours of daylight," the cardiologist remarks. A research team from the department of public health medicine at Greater Glasgow Health Board, led by Dr. Jill Pell, also stated that heart attacks are most frequent in winter because in cold weather blood vessels constrict, but the blood flux remains the same, therefore people have to deal with increased blood pressure and heart strain. The scientists also referred to the fact that in winter our body usually presents lower levels of vitamin D. Also, there are higher levels of cholesterol in the organism due to the fact that we eat more fats in the cold season than in summer, as fruits and vegetables are not so available. Respiratory disorders which usually occur in winter represent another factor associated with heart attacks. However, many people can be exposed to heart attacks in the hot season due to the fact that they usually over-exercise in summer as compared to their lack of physical activities in winter. Those who do not exercise during the cold season and then go on trips, swim extensively etc. during summer are very likely to suffer from a heart attack, especially if they have previously shown signs of heart disorders. There are also the air pollutants that occur mostly in summer and can lead to heart attacks during the hot season. A study published in *Circulation: Journal of the American Heart Association* found that when inhaled, air pollutants can penetrate the natural defense shield of the lungs and may trigger a heart attack. Dr. Murray Mittleman, co-leader of the study and director of cardiovascular epidemiology at Boston's Beth Israel Deaconess Medical Center stated that "studies of hospital admissions and emergency department visits have linked exposure to particulate air pollution with increased risk of cardiovascular diseases." Dr. Douglas Dockery, professor of environmental epidemiology at the Harvard School of Public Health, who was also involved in the study, said that fine particle pollution is usually a summer phenomenon and added: "Pollution monitors show seasonal variations where hot, hazy days have higher levels of fine particles on average." Therefore, try avoiding strenuous activities during summer, because extremely high temperatures associated with air pollution make a very dangerous combination that can lead to heart attacks.