University of Waterloo W. H. Cherry

EM9101: The Globe and Mail, January 11, 1991, page A7

## Passive smoking studied

## Heart disease risk outlined in tests

BY PAUL TAYLOR Medical Reporter

Non-smokers who live and work with smokers are at risk of developing heart disease by breathing in second-hand smoke, according to U.S. researchers.

"There is a lot of convincing evidence and it comes from the results of more than just one experiment," said Stanton Glantz, a professor of medicine at the University of California in San Francisco.

In an article published in the current issue of *Circulation*, the journal of the American Heart Association, Prof. Glantz and Dr. Wil-

liam Parmley, also of the University of California, reviewed 71 separate studies dealing with various aspects of second-hand smoke.

They concluded "a whole bunch of bad things happen" when people breathe in second-hand smoke, Prof. Glantz said in an interview.

Second-hand smoke – also known as passive smoking – makes blood platelets abnormally sticky and more likely to form clots that block the flow of blood and cause a heart attack, Prof. Glantz said. Sticky platelets also play a role in the buildup in heart artery walls of fatty deposits that lead to heart attacks.

He added that carbon monoxide (CO) in

second-hand smoke hampers the ability of red blood cells to carry oxygen. That means vital organs – including the heart itself – are deprived of badly needed oxygen. Also, nicotine constricts arteries, further reducing the flow of blood.

Using studies of spouses in which one is a smoker and one is not, the researchers estimated that each year at least 53,000 people die in the United States from heart disease caused by second-hand smoke.

"This toll makes passive smoking the third leading preventable cause of death in the United States today, behind active smoking and alcohol," the researchers concluded.

The article EM9101 reprinted above is used, together with EM9035, in Figure 1.8 of the STAT 220 Course Materials.

1995-04-20