

Barry Franklin



Why snow shoveling can be such a killer

QUESTION: Why is snow shoveling considered particularly dangerous for individuals with a history of or at high risk for heart disease? Can the potential dangers be reduced?

Aside from the simple hazards of frostbite and low back strains and sprains, snow shoveling can be deadly. During the cold winter months, news stories like the following are not uncommon.

"Nine men from the county collapsed and died yesterday while clearing snow near their homes. The deaths brought to 13 the number of weather-related fatalities since frigid air and heavy snow slashed into northern Ohio Tuesday."

The association between snow shoveling and heart attacks or sudden death is not coincidental. Snow shoveling represents an extremely strenuous activity requiring seven to nine times the resting energy requirements for loads weighing between 12 and 14 pounds.

For the person who is not physically fit and unaccustomed to strenuous activity, these levels of energy expenditure may require maximal or supra-maximal efforts.

THE STRAIN of snow shoveling is further aggravated by numerous facts. Among them are the reduced mechanical efficiency associated with upper extremity efforts, superimposed isometric (static) exercise, breath holding, and the inhalation of or exposure to cold air.

These factors, singly and collectively, create a disproportionate heart rate and blood pressure response to effort, drastically increasing the demands of the heart for blood and oxygen.

In contrast to isotonic or rhythmic exercise, isometric straining, often in combination with breath holding, increases resistance to blood flow and restricts the amount of blood returned to the heart. Finally, inhaling cold air may result in a reflex

spasm or a temporary narrowing of the heart's own blood vessels (coronary arteries).

In the presence of an already narrowed coronary circulation, these manifestations may lead to ischemia (lack of oxygen to the heart muscle), perhaps with chest pain or irregular and possibly dangerous heart rhythm disturbances.

SEVERAL GENERAL and specific recommendations are offered:

1. Elderly individuals or those with a history of heart disease simply should not shovel snow. Get someone to do it for you.

2. The older you are, particularly over the age of 40, the more you should pace yourself. Adopt an interval or work-rest approach.

3. Sudden strenuous exertion may result in excessive strain on the heart. Warm-up by beginning to exercise gradually. It may be desirable to warm up

indoors in some instances.

4. Lift small loads more often, rather than large, heavy loads.

5. Use a short shovel with a small scoop.

6. Wear a cold weather mask or scarf to avoid face and neck exposure to cold air, in inhaling it.

7. Avoid eating large meals, or coffee, tea, or colas — before or after shoveling.

8. Abstain from alcohol or tobacco before and after shoveling.

9. Place this label on your home shovel: **WARNING: USE OF THIS INSTRUMENT FOR SNOW REMOVAL MAY BE HAZARDOUS TO YOUR HEALTH.**

The columnist, a PhD, is co-director of cardiac rehabilitation at Sinai Hospital and assistant professor of physiology at Wayne State University. Questions of general interest may be sent to him in care of this newspaper.

House limits candidates' spending, credit

Here's how area U.S. Congress members were recorded on major roll call votes Oct. 11 through Oct. 17.

HOUSE

SPECIAL-INTEREST MONEY: By a 217 to 198 vote, the House adopted an amendment limiting the campaign contributions by a House candidate can receive from special interests to \$70,000 every two years. Such money usually is provided through political action committees (PACs). Of the 435 House members, about 52 received more than \$70,000 in PAC contributions during the 1978 campaign. Hundreds of business and labor PACs are registered with the Federal Election Commission. In return for financial support a PAC usually expects a congressman to legislate according to its desires on certain issues.

This amendment also reduced from \$10,000 to \$5,000 the maximum contribution a PAC can make to a candidate for a primary and general election for the House. It was attached to a Federal Election Commission bill later passed and sent to conference in the Senate.

Rep. Frank Thompson, D-N.J., a supporter, said that "left unrestricted, PAC money will become a preeminent force in the democratic process,

which, in effect, would render the process undemocratic."

Rep. Mendel Davis, D-S.C., an opponent, said the amendment wrongfully attacked constitutionally protected activity, such as free spending by individuals and groups to promote and support their own candidacies or views.

Members voting "yea" favored limiting special interest contributions. Reps. Carl Pursell, R-Texas, David Bonior, D-Mt. Clemens, William Ford, D-Taylor, William Brodhead, D-Detroit, and James Blanchard, D-Pleasant Ridge, voted "yea."

Rep. William Brodhead, R-Birmingham, voted "nay."

FUND-RAISING: By a vote of 298 to 114, the House adopted an amendment restricting the credit a candidate for a House seat can receive. The vote came during debate on special interest money (see previous vote). The amendment requires candidates to pay cash for direct-mail fund-raising services. Delayed payment is the equivalent of receiving a campaign contribution, according to the amendment.

Rep. Frank Thompson, D-N.J., the sponsor, said his amendment was in keeping with the bill's overall purpose

roll call report

of limiting special-interest contributions.

Rep. Bill Frenze, R-Minn., an opponent, said the amendment would primarily benefit the AFL-CIO, Common Cause, and "the incumbent members of the House who would like to have as little challenge as possible."

Members voting "yea" favored the amendment.

Pursell, Bonior, Ford, Brodhead and Blanchard voted "yea."

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