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WARNING: THE HOLIDAY SEASON MAY BE DETRIMENTAL TO YOUR HEALTH

TAKING OUR PULSE

The holiday season is upon us, with all the good feelings and happy events that surround it. However, it is also a time of particular risk from a health perspective. A considerable body of research has pointed to a heightened frequency of unfortunate medical events that seem to occur at this time of year. The evidence does not always pinpoint whether the culprit is the winter season itself (for those of us who live in cold climates) or the celebrations and lifestyle changes that happen in this period, or other less well-defined physical or social factors. But let's review some of the findings and some preventive measures that may be helpful.

JUST WHAT THE DOCTOR ORDERED

A Dutch study of the 65+ years old population came to the following conclusions:

The mortality rates of older people differ significantly between the seasons, and are 21% higher in the winter compared to the summer. Medical care expenditure rises with 13% from the summer to the winter; this seasonal difference is higher for the non-deceased than for the deceased group (14% vs. 6%). Seasonal variation in mortality is more pronounced in men and people in residential care. Seasonal variation in medical care expenditure is more pronounced in women. Institutionalization rates are significantly higher in winter, but the other seasons show no significant impact.

At the other end of the age spectrum, children are prone to a variety of infectious illnesses which are prevalent in the winter, including:

- Common cold
- RSV/Bronchiolitis
- Influenza
- Croup
- Pneumonia
- Strep Throat

Keeping kids healthy and out of the doctor's office can be a challenge in the winter months. Teach your children good hand hygiene and how to cover their mouths (with their elbow) with coughing or sneezing. If you have a young infant at home, try to avoid crowded areas or visiting with people who are known to be ill. If your child is sick, please keep them home from school or daycare so you don't spread the illness to other children or staff members. In general, your child can return to school once their fever has been gone for 24 hours (with no Tylenol or Ibuprofen needed) and when symptoms are otherwise improving.

It appears that cholesterol levels are higher in winter than in summer, for reasons that are not entirely clear. A similar phenomenon occurs in blood pressure measurements.

A variety of studies have noted seasonal variation in blood lipid levels. Although the mechanism for this phenomenon is not clear, such variation could result in larger numbers of people being diagnosed as having hypercholesterolemia during the winter.

Overall, 22% more participants had total cholesterol levels of 240 mg/dL or greater in the winter than in the summer.

Small longitudinal and larger cross-sectional studies suggest that cholesterol levels are higher in the fall and winter than in the spring and summer. Studies reporting the most striking effects suggest that in areas of extreme seasonal climatic variation, such as Finland, there may be as much as a 100-mg/dL seasonal variation in serum cholesterol levels.

There is no doubt, based on numerous studies, that heart-related mortality peaks in the winter months, and particularly on holidays:

Coronary heart disease exhibits a winter peak and summer trough in incidence and mortality, in countries both north and south of the equator. In England and Wales, the winter peak accounts for an additional 20,000 deaths per annum. It is likely that this reflects seasonal variations in risk factors. Seasonal variations have been demonstrated in a number of lifestyle risk factors such as physical activity and diet. However, a number of studies have also suggested a direct effect of environmental temperature on physiological and rheological factors.

Research published in *Circulation* has shown that cardiac mortality is highest during December and January. We investigated whether some of this spike could be ascribed to the Christmas/New Year's holidays rather than to climatic factors.

Our findings suggest that the Christmas/New Year's holidays are a risk factor for cardiac and non-cardiac mortality. There are multiple explanations for this association, including the possibility that holiday-induced delays in seeking treatment play a role in producing the twin holiday spikes.

- Respiratory diseases. Respiratory diseases increase during winter, and patients weakened by respiratory diseases can die from cardiac diseases.
- Emotional stresses associated with holidays
- Changes in diet and alcohol consumption

- Increased particulate pollution. The increase in particulate pollution during the winter might be consistent with a general increase in winter mortality, but this hypothesis cannot easily explain the twin mortality spikes on Christmas and New Year's.

Finally, miscellaneous other conditions appear to be more prevalent at holiday times:

- acid reflux (GERD), gastritis and ulcer disease
- pancreatitis
- drug overdoses and alcohol poisoning
- traffic accidents
- sporting injuries

CIRCULATING IN THE PRESS

So let's not end on a gloomy note. You can certainly modify your risk factors without dampening your celebrations by moderating your activities and minimizing the impact of the following disruptive behaviors:

- Excessive alcohol consumption and illicit drug abuse
- Fatigue and insufficient sleep
- Psychological stress – financial, emotional and other
- Alterations in dietary habits
- Missing prescription medication
- Overexertion – physical strain
- Driving under the influence and holiday traffic issues
- Local or international travel

While researchers are still trying to pinpoint the exact reasons for the Christmas coronary, physicians recommend these common-sense measures during this special time of year:

- **Pile on the layers.** Try to avoid exposure to very cold temperatures. Dress warmly.
- **Take a load off.** Steer clear of heart stressors, including too much physical exertion (especially snow shoveling), anger, and emotional stress.
- **Make good choices.** Avoid excess salt and alcohol. Too much drinking – for example, binge drinking – can lead to atrial fibrillation, an abnormal heart rhythm in which disorganized electrical signals cause the heart's two upper chambers to contract irregularly. Atrial fibrillation increases the risk of stroke, heart attack, and heart failure.
- **Get a shot.** Consider getting a flu vaccination. Infection and fever put extra stress on the heart.
- **Breath.** Go indoors during air pollution alerts but try to avoid breathing smoke from wood-burning fireplaces. If you're visiting another home during the holidays, sit as far away as you can from a burning fireplace. Ultra-fine particles in the air can be bad for the heart.
- **Get help.** If you feel chest pain or other symptoms, call 911 for emergency help. The stakes are high, so give yourself and your family a gift this season. Don't postpone treatment because you don't want to spoil the holiday merrymaking.

Best wishes from the Broadspire Medical department for a happy holiday season and a healthy new year!

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