

# Beaumont issues annual deer hunting alert

Deer hunters, beware! Nearly a million hunters will take to the woods and fields as the rifle season for deer hunting opens in Michigan. The excitement of spotting a deer, combined with strenuous activity and heart-disease risk factors, could place hunters at risk of having a heart attack.

William Beaumont Hospital conducted the first study of its kind to determine whether deer hunters are at elevated risk for

heart attack. To test the hypotheses, researchers sent 25 deer hunters into the woods equipped with heart rate monitors. Results determined that just sighting a deer can cause a hunter's heart rate to soar to the peak heart rate achieved during cardiac stress testing.

"The heart rate of some hunters would almost double upon seeing a buck deer, even though they were standing totally still," said exercise physiologist

and researcher Susan Haapaniemi of Beaumont's Cardiac Rehabilitation program. Shooting, gutting and dragging a deer pushed hunters' heart rates well above the maximum, she said.

Twenty-one of the 25 hunters who participated in the study had heart rates equal to or higher than 85 percent of their maximum heart rate while merely walking to their blind.

"Exceeding the maximum

heart rate for a sustained period of time places a hunter with hidden or known heart disease at high risk for heart attack. The hunters were often unaware of what was happening with their hearts during these activities."

Cold weather, bulky hunting equipment, rugged terrain and a hunter's personal lifestyle (smoking, drinking, fitness level) are other factors that may accentuate the cardiac risks of hunting.

Haapaniemi stopped short of recommending that hunters with a history of heart disease avoid deer hunting altogether, but she did recommend some tips:

- Don't drink or smoke the day before hunting.
- Don't eat a heavy meal before hunting.
- Before participating in a hunt, spend some time raising your fitness level through regular brisk walking or

other aerobic exercise.

■ Never drug a deer if you have heart disease.

■ If you have high blood pressure, high cholesterol or other risk factors, such as smoking, check with your doctor before hunting.

■ If you experience any of the warning signs of a heart attack - dizziness, chest pain or heart palpitations - stop what you're doing and get medical help.

## Researchers find red flag for lethal prostate cancer

High levels of activity in a gene called EZH2 could be a warning sign of metastatic prostate cancer, according to scientists at the University of Michigan's Comprehensive Cancer Center.

In an article published in the October issue of *Nature*, U-M scientist Dr. Arul M. Chinnaiyan and his research team used advanced DNA microarray technology to show that EZH2 expression was at "the top of the list" of 55 genes found to be more active in metastatic prostate cancer than in localized prostate cancer.

This is the first study linking EZH2 to solid tumors, Chinnaiyan wrote.

When the EZH2 gene is active, the cell uses its coded instructions to produce EZH2 protein. U-M scientists believe a future diagnostic test for high

levels of this protein could serve as a red flag for physicians and help save the lives of men with the most dangerous form of the disease.

"We found the greatest EZH2 overexpression in metastatic prostate cancer tissue. At this point, it's unclear whether the gene plays a role in cancer's development or is simply an indicator of lethal progression," said Chinnaiyan, an assistant professor of pathology and urology in the U-M Medical School.

If additional research and human clinical trials confirm the U-M results, a test for EZH2 protein could, for the first time, allow physicians to identify accurately those men who need immediate, aggressive treatment to prevent the cancer from spreading outside the prostate. Once prostate

cancer metastasizes (spreads to other organs), it is usually incurable.

"Over the past 50 years, there has been no significant improvement in clinical outcome for men diagnosed with advanced prostate cancer and no way to tell ahead of time which cancers will spread and which cancers will remain localized," said Dr. Mark A. Rubin, a former U-M faculty member who is now an associate professor of pathology at Brigham and Women's Hospital. "It is exciting to think that we may have finally found something to help the 30,000 men who die every year from metastatic prostate cancer."

### OTHER FINDINGS

Another intriguing finding reported in the *Nature* paper

was the use of a new technique called RNA interference to inhibit production of EZH2 protein in cancer cells. RNA is the messenger molecule that copies DNA's genetic instructions and delivers them to the cell's protein-production factory. In 2001, scientists discovered that short sequences of RNA could be used to shut down the activity of specific genes in mammalian cells.

"We ordered RNA nucleotides specifically targeted for the EZH2 gene and tested them on two different prostate cancer cell lines. The first thing we noticed is the cells stopped growing. After 120 hours, 80-90 percent of the cultured cells containing the RNA nucleotides targeted for EZH2 had stopped dividing. When cells can't divide and grow, they

die. This suggests that EZH2 could play an important role in the progression of prostate cancer."

Chinnaiyan and Rubin hope to discover exactly how the EZH2 gene regulates cell division and whether EZH2-targeted RNA interference will have the same effect on cancer cells in living animals.

Rubin and Chinnaiyan emphasized it is unlikely there will be just one biomarker for prostate cancer. In previous research published in the April issue of the *Journal of the American Medical Association*, they described another protein called AMACR, which is overexpressed in several types of cancer. Used in combination with screening tests for AMACR and other biomarkers, they believe a test for EZH2 could help physicians diagnose

cases of prostate cancer earlier and determine the most effective and least invasive treatment for each patient.

Research on the genetic and molecular profile of prostate cancer is part of a major initiative under way in the U-M's Comprehensive Cancer Center. Its goal is to link molecular genetics and clinical outcome for all types of cancer.

This research was supported by the National Cancer Institute, CaPcure and the U-M Prostate Specialized Program of Research Excellence, directed by Dr. Kenneth Pienta, a study co-author and professor of internal medicine and surgery in the U-M Medical School. The U-M has applied for a patent on prostate cancer gene expression profiles for future diagnostic and therapeutic use.

## More flu shots available

This season, don't let the flu get you again - get immunized at one of Michigan Visiting Nurses' (MVN) full immunization clinics in your local community. This year, unlike last, more vaccine will be available.

Clinics will be held November through December and are open to the general public, 18 years and older. Flu shots for children 12 years and older, who are accompanied by a parent or guardian, will also be available at select sites. Flu shots are \$17 each. MVN will bill for those with Medicare - Part B (who are not part of an HMO).

In addition, businesses may contact MVN online at [www.umvn.com](http://www.umvn.com) to schedule an on-site flu immunization clinic for their employees.

### Clinics:

■ Nov. 18, 10 a.m. - 2 p.m., Meijer, Westland

■ Dec. 3, 10 a.m. - 2 p.m., Busch's, Farmington Hills

■ Dec. 3, 9:30 a.m. - 4:30 p.m., MVN, 2850 S. Industrial, Ann Arbor

■ Dec. 10, 9:30 a.m. - 4:30 p.m., MVN, 2850 S. Industrial, Ann Arbor

\* Denotes clinics where flu shots will be available for children, 12 years and older, who are accompanied by a parent or guardian.

Call MVN at (734) 677-0020 or check MVN's Web site ([www.umvn.com](http://www.umvn.com)) each week for a complete list of sites near you.

MVN, part of the University of Michigan Health System, is a non-profit organization that has served the community since 1909.

## St. Mary Mercy offers massage

Stressed out? Tight neck and shoulder muscles? Take a break and head to St. Mary Mercy Hospital for a relaxing massage.

Massage therapy is the manipulation of soft tissue for therapeutic purposes. It can improve circulation, relax tense muscles, calm the nervous system and enhance body awareness.

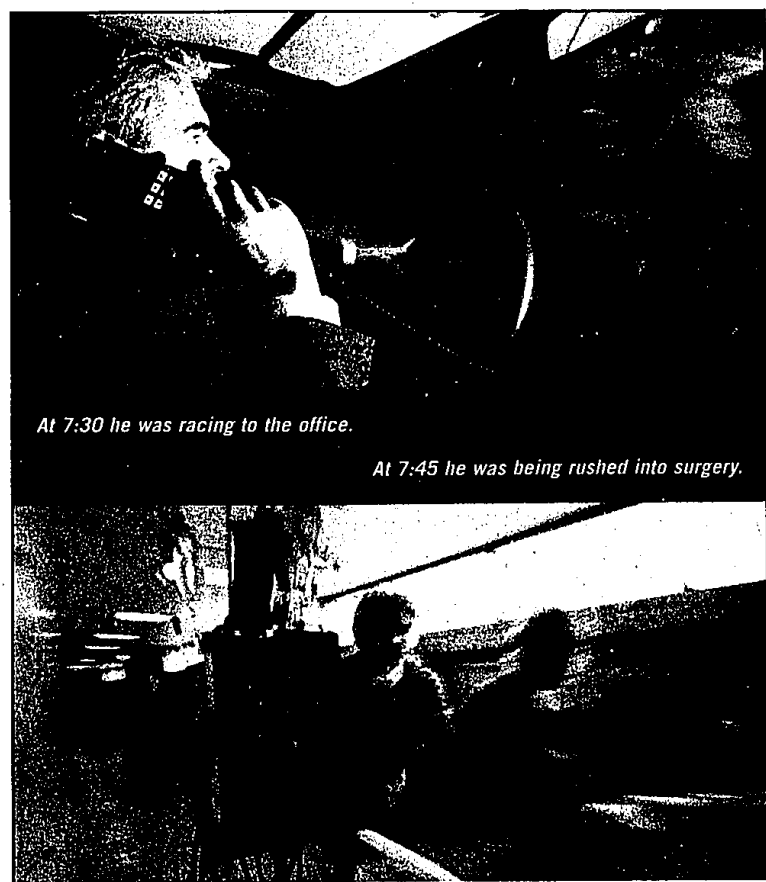
"The hospital employs a staff of certified massage therapists with credentials that exceed the state of Michigan requirements," said Sarah Gilbert, founder of the Massage Therapy Program and current director of Cancer Services.

Therapeutic massage at St. Mary Mercy includes such techniques as trigger point therapy, Swedish, deep tissue and reflexology. Prenatal massage is offered for the mother-to-be to help reduce stress as well as prevent varicose veins, swelling in the limbs and to decrease blood pressure. Infant massage and couple's massage classes also are available.

On staff at St. Mary Mercy Hospital are Teresa Doherty and Charles Dougan. Doherty, who is certified through Utah College of Massage Therapy, has special certification in pre- and post-natal massage therapy.

Dougan is nationally certified in massage and bodywork and has special interest in sports/ortho massage. The newest member of the massage therapy staff, he has worked with college, professional and Olympic athletes, as well as spas. He also works with people suffering from fibro-myalgia and chronic pain, as well as those recovering from injury.

Massage Therapy is located in the Marian Women's Center. Fifteen-, 30- and 60-minute massages are offered for a fee. St. Mary Mercy Hospital is at 36475 Five Mile at Levan in Livonia. For information, call the Physical Medicine and Rehabilitation Department at (734) 655-2955.



At 7:30 he was racing to the office.

At 7:45 he was being rushed into surgery.

The Botsford Emergency Department has an open door to the community, 24 hours a day, 7 days a week. We are prepared to deal with a medical emergency whenever one arises. While we focus immediate attention on the medical issue of the moment, we maintain sensitivity to the anxieties of family and friends. Whether it's a heart attack, broken bone or any other emergency, our specialized treatment considers the individual needs of each patient. Our board-certified emergency department physicians have access to a full range of specialists. Our Emergency Services are a blending of prompt care and personal care that has come to be recognized as Botsford Care. We hope you will never need us. But if you do, we are here.



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### NIGHT CRAMPS

Cramps in your legs, that come on while you are sleeping are a common problem. You soon learn that the best way to stop the cramp is to get up and move. You may be able to walk off the cramp in five minutes or less, but going back to sleep is not easy. If you are lucky, you only experience one episode; it is possible to have two or three attacks during the night.

The cause of night cramps is unclear. It is difficult for trained medical investigators to be at hand to take blood samples and perform muscle and nerve conduction studies when the attacks come. What is known is that these attacks are not the result of low calcium, potassium or sodium. Medications do not seem to set off the cramps. Nor are they related to tension, anxiety or depression.

The most common treatment is quinine sulfate, 300 mg before going to bed. Studies to evaluate the effect of this therapy give mixed results. Some investigations show the medication lessens the number and intensity of the cramps. Other studies indicate that quinine sulfate is no better than placebo. Some doctors feel they should do something for the problem, and since no other medicine has proven to be helpful at all, the medical community continues to prescribe quinine sulfate.

Rescue legs is a completely different condition. It involves a crawling sensation in the legs and is accompanied by a burning or sharp pain. Often the condition is hereditary. Treatment includes medicines used for Parkinson's Disease although rescue legs syndrome has nothing to do with Parkinson's Disease.

[www.drjweiss.yourmd.com](http://www.drjweiss.yourmd.com)