Night shift linked to cancer

WASHINGTON (AP) - Women who work nights may increase their breast cancer risk by up to 60 percent, according to two studies that suggest bright light in the dark hours decreases melatonin secretion and increases estrogen levels.

Two independent studies, using different methods, found increased risk of breast cancer among women who worked night shifts for many years. The studies, both appearing in the Journal of the National Cancer Institute, suggested a "dose effect," meaning that the more time spent working nights, the greater the risk of breast cancer.

"We are just beginning to see evidence emerge on the health effects of shift work," said Scott Davis, an epidemiologist at the Fred Hutchinson Cancer Research Center in Seattle and first author of one of the studies. He said more research was needed, however, before a compelling case could be made to change night work schedules.

"The numbers in our study are small, but they are statistically significant," said Francine Laden, a researcher at Brigham and Women's Hospital in Boston and coauthor of the second study.

"These studies are fascinating and provocative," said Larry Norton of the Memorial Sloan-Kettering Cancer Center in New York. "Both studies have to be respected."

But Norton said the findings only hint at an effect and raise "questions that must be addressed with more research." In Davis' study, researchers explored the work history of 763 women with breast cancer and 741 women without the disease.

They found that women who regularly worked night shifts for three years or less were about 40 percent more likely to have breast cancer than women who did not work such shifts. Women who worked at night for more than three years were 60 percent more likely.

The Brigham and Women's study, by Laden and her colleagues, found only a "moderately increased risk of breast cancer after extended periods of working rotating night shifts."

The study was based on the medical and work histories of more than 78,000 nurses from 1988 through May 1998. It found that nurses who worked rotating night shifts at least three times a month for one to 29 years were about 8 percent more likely to develop breast cancer. For those who worked the shifts for more than 30 years, the relative risk of breast cancer went up by 36 percent.

The studies relate to working hours between 7 p.m. and 9 a.m. on shifts that include the peak melatonin secretion time of about 1:30 a.m., the researchers said.

American women have a 12.5 percent lifetime risk of developing breast cancer, according to the American Cancer Society. Laden said her study means that the lifetime risk of breast cancer for longtime shift workers could rise above 16 percent. There

are about 175,000 new cases of breast cancer diagnosed annually in the United States and about 43,700 deaths. Breast cancer is the second only to lung cancer in causing cancer deaths among

Both of the Journal studies suggested that the increased breast cancer risk among shift workers is caused by changes in the body's natural melatonin cycle because of exposure to bright lights during the dark hours.

Melatonin is produced by the pineal gland during the night. Studies have shown that bright light reduces the secretion of melatonin. In women, this may lead to an increase in estrogen production; increased estrogen levels have been linked to breast cancer.

"If you exposed someone to bright light at night, the normal rise in melatonin will diminish or disappear altogether," said Davis. "There is evidence that this can increase the production of reproductive hormones, including estrogen."

Davis said changes in melatonin levels in men doing nighttime shift work may increase the risk of some types of male cancer, such as prostate cancer, but he knows of no study that has addressed this specifically.

Both Laden and Davis said the melatonin-estrogenbreast cancer connection is still a theory that will require more research to prove or disprove.

Dr. S. Eva Singletary, a breast cancer specialist at (See Cancer, Page 17)



Links hosts successful walk-a-thon for health

Special to Sentinel-Voice

The Links, Inc. held its 7th Annual Walk-A-Thon at the Jaycee Park on reently. The monies raised from "Take Charge Of Your Health" walk-a-thon will

benefit the Economic Opportunity Board's Children's Head Start Dental Screening Program.

Health information, voter registration, (See Walk-a-thon, Page 17)

Smallpox

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a person suffering the characteristic rash, to breathe in the smallpox virus and catch the disease. Quickly vaccinating those who live with or work around a patient is protective.

But, "a single case of smallpox would require an immediate and coordinated public health and medical response to contain the outbreak and prevent further infection," the plan's opening page warns.

Smallpox hasn't occurred in the United States since 1949; the world's last naturally occurring case was in Africa in 1977. When smallpox was declared eradicated in 1980, all research stocks of the virus were supposed to have been contained at the CDC's Atlanta laboratory and a similar lab in Russia. But the Soviet Union instead produced smallpox for their biological weapons program in the 1980s, and bioterrorism experts fear some may have spread to terrorist-sponsoring countries.

Smallpox symptoms include fever and a pock-like rash all over the body, which appears seven to 17 days after exposure to the virus. People are contagious from the time the rash appears, particularly in that first week of illness, until the scabs fall off.

The CDC's emergency plan would kick in when a doctor alerted state or federal health officials that a patient should be tested for

smallpox, a test that can be confirmed only at CDC or at the Army's Fort Detrick, Md.

If smallpox were confirmed, he or she would be quarantined immediately. CDC Director Jeffrey Koplan would send vaccine from the government's stockpile while alerting the FBI and White House.

Disease detectives would grill the sick person and his family about every step taken over three weeks before becoming ill. They also would want addresses and phone numbers of every person who had close contact with the patient.

CDC then would have state health officials track down all of those people, vaccinate those who needed it, and do daily monitoring of whether they get a fever - a sign they, too, might be sick with smallpox and require quarantine.

The plan instructs how to give the hard-tohandle vaccine. It is made with a live version of a virus related to smallpox, and thus can cause serious reactions in certain people, including people with faulty immune systems or those with the skin condition eczema. The document pictures a child covered in eczema-like lesions after contact with a recently vaccinated sibling.

The worst reaction is a very rare - one in 300,000 vaccinated babies - but deadly encephalitis.

Crisis

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refuge across national borders.

At the outset of the crisis, United Nations agencies, like UNICEF and World Food Program, had to pull their international staff out of Afghanistan and set up headquarters at satellite locations where at least limited cross-border relief operations are possible.

UNICEF officials said a children's "winter convoy" organized in Iran arrived in the western Afghan town of Heart, delivering food, medicine and supplies to a large population of displaced families. A convoy from Quetta, a city located in western Pakistan, was also mobilized to cross the border into southern and eastern Afghanistan.

A UNICEF relief convoy from Turkmenistan survived the rugged terrain and arrived in northern Afghanistan. In total, only eight UNICEF convoys have entered Afghanistan in recent days.

Before the Sept. 11 crisis, the U.N. World Food Program estimated that there were 2 million civilians in Afghanistan already dependent on foreign food aid. The World Food Program was trucking in a staggering 500 tons a day-enough to feed approximately 1 million people.

The pre-existing humanitarian crisis in Afghanistan was the result of more than 20 years of war, three years of severe drought, and the ongoing displacement of more than one million people. With the onset of winter, conditions were

expected to worsen even before the current military crisis erupted in September.

Since Oct. 7, daily U.S. air strikes across Afghanistanincluding bombardments in major cities like Jalalabad, Kandahar and Kabul, the capital-have heightened the humanitarian crisis and simultaneously halted international relief efforts.

In addition to the approximately 4 million refugees already located in neighboring nations, hundreds of thousands of Afghans have now fled their country in the wake of U.S. bombardments. More than 400,000 new refugees have fled to Iran and some 200,000 to Pakistan.

Humanitarian workers have estimated that 2,750 tons of food each day is now needed to feed some 5.5 million



Afghans. The International Red Cross said that its 48 clinics inside Afghanistan would run out of essential medicines within weeks unless deliveries can resume.

John Price writes for The New York Amsterdam News

