

Health Highlights: Aug. 13, 2007

08.13.07, 12:00 AM ET

Here are some of the latest health and medical news developments, compiled by editors of *HealthDay*:

Scientists Spot Deadly West Nile Virus Mutation

A single genetic mutation causes the West Nile virus to become far more virulent, which leads to an increased risk of death in birds and likely in humans as well, concludes a U.S. study in the journal *Nature*.

The researchers also found that this mutation was "positively selected," which means that it "gives the virus a fitness advantage and enhances its ability to replicate," study lead author Aaron Brault, of the University of California at Davis, told *Agence France-Presse*.

Brault said this makes it easier for the West Nile virus to adapt to rapidly changing environments.

The study found that the death rate among crows exposed to the more virulent strain of the virus was 94 percent, compared to 31 percent among crows exposed to a less virulent version, *AFP* reported.

In 2006, 4,200 people in the United States were infected with the West Nile virus and 177 died. So far this year, only about a dozen deaths have been reported, but the number of infections has increased fourfold compared to the same time last year.

Obese People Underestimate Sugar Intake

Many obese people underestimate their sugar consumption, which means that studies based on patient self-reporting are unreliable, say researchers from the Medical Research Council and the University of Cambridge in the U.K.

They had hundreds of people report how much sugar they ate and compared that information to data from a new urine test that provides an accurate measurement of actual sugar intake, *BBC News* reported.

"These results show what many have suspected for some time: obese people are not able to tell us what they actually eat," said research team leader Professor Sheila Bingham. "If we are to tackle the scourge of obesity, both exercise and diet need to be taken into account."

The study appears in the journal *Cancer Epidemiology, Biomarkers and Prevention*.

Some previous studies that suggested no link between sugar consumption and obesity relied on patient self-reporting, *BBC News* reported. But the conclusions of those studies were based on inaccurate data, Bingham and her colleagues said.

Biodegradable Patch Fixes Common Heart Defect

A method of promoting the body's natural healing power that can correct a common heart defect called patent foramen ovale (PFO) is being used by doctors at the Royal Brompton Hospital in London, England.

One in four people has this valve-like hole in the heart, which is linked with an increased risk of stroke and migraine, *BBC News* reported. PFO can be closed surgically using a graft, but this approach can cause damage to surrounding tissue.

This new technique uses a bioabsorbable patch that acts as a temporary plug. Within about 30 days, the body replaces the patch with healthy normal tissue. So far, the patch has been used in about 70 patients at Royal Brompton Hospital, *BBC News* reported.

"Traditional grafts are permanent and so can cause an inflammatory reaction, which can lead to problems," said consultant cardiologist Michael Mullen.

"Instead, this (patch) treatment does the repair job and then disappears in a natural way. The healing is very similar to how the body would heal itself normally."

'Brain-Drain' of Dangerous Protein May Offer Help for Alzheimer's

Is it possible to "flush" away the buildup of dangerous substances in the brain that cause Alzheimer's disease?

That's what researchers from the University of Rochester (N.Y.) Medical Center have tried on laboratory mice, and the results have indicated that the amyloid protein linked to causing Alzheimer's can be drained away.

According to a university news release, the "brain-drain" method doesn't address the cause of Alzheimer's, which most medical researchers believe is the buildup of a protein in the brain called amyloid-beta. This substance creates the lesions that interrupt a person's memory signals and eventually leads to irreversible dementia.

So, rather than attack the cause of the protein, the researchers found a way to increase the body's ability to absorb amyloid-beta. This causes the brain to "order" levels of the substance in the brain to decline. This was done by using a modified form of soluble low-density lipoprotein receptor-related protein, which helps control the amount of amyloid-beta in the brain.

The result: The levels of amyloid-beta in the brains of the laboratory mice was reduced by 85 to 90 percent. The researchers are now working on adapting their procedure for clinical trial on humans.

The research paper was published online Sunday by the journal *Nature Medicine*.

U.S. Ranks 42nd in Life Expectancy, Statistics Show

While Americans' life span continues to grow, people in the United States might be surprised to learn their longevity rate doesn't even come close to cracking the top 25.

According to a survey done by the *Associated Press*, the United States ranks behind most of Europe, Japan and even Jordan and Singapore.

Not only that, the *AP* reports, but also the United States' ranking at 42nd in life expectancy (average age of 77.9 years) is much lower than 20 years ago, when it ranked 11th.

Some of the reasons for the decline in ranking were the United States having the world's highest obesity rates and a five-year disparity in lifespan between white and black Americans (black Americans' average longevity is 73.5 years), according to research proved by the U.S. Census Bureau and the National Center for Health Statistics.

"The U.S. has the resources that allow people to get fat and lazy," Paul Terry, an assistant professor of epidemiology at Emory University in Atlanta, told the *AP*. "We have the luxury of choosing a bad lifestyle as opposed to having one imposed on us by hard times."

And where do people live the longest? According to the U.S. Census Bureau, the country with that distinction is Andorra, a tiny country in the Pyrenees between France and Spain, with an average life expectancy of 83.5 years.

Obesity Cited as Elementary School Absenteeism Predictor

It's not illness that keeps elementary school children away from the classroom most often.

It's obesity, say University of Pennsylvania and Temple University researchers in a study released Aug. 10, the *Associated Press* reports. In fact, obesity is the best predictor of school absenteeism, the scientists say.

According to Andrew B. Geier, the study's lead author and a doctoral candidate at the University of Pennsylvania, obese elementary school children, on average, miss a couple more school days each year, and that's a prediction for possible major problems down the road. "It's clear in all the literature that the more days of school you miss, it really sets you up for such negative outcomes: drugs and AIDS and (teen) pregnancy," Geier told the wire service.

"At this early age to show that already they're missing school, and missing school is such a major setup for big-time problems, that's something school policy people have to know," Geier said. The study was confined to the schools in the poorest areas of Philadelphia in order to keep the test group as homogeneous as possible, the *A.P.* reports.

The study didn't examine physical health issues associated with being overweight, the wire service reports. Rather, it dealt with emotional or

psychological reasons behind the absenteeism. "They're missing school because they don't want to be bullied and called names," the *A.P.* quotes Geier as saying. The study can be found in the latest issue of the journal *Obesity*.