Infectious Diseases Lead the Way; Heart, Cancer, and Plastic Surgery Stories Also Make Headlines

By DAN CHILDS
ABC News Medical Unit

Dec. 29, 2006 — It's been a busy year in medical news, with stories ranging from E. coli infections to New York City's ban on trans-fats receiving broad coverage.

ABCNews.com polled dozens of experts to determine which of this year's stories had the most significant implications for health in general. Topping the list was the lingering threat of a bird flu pandemic.

But this wasn't the only health headline that grabbed attention. The development of Gardasil, a vaccine for the sexually-transmitted human papilloma virus (HPV), could signal the end for cervical cancer, once one of the most deadly cancers among women.

More good news for women came with a finding that breast cancer incidence has been on a steady and significant decline since 2001.

The following list is a top 10 roundup of what our experts felt were the most important health stories of 2006:

Infectious Disease -- Bird Flu and Threat of Viral Pandemics

As reports of avian influenza outbreaks continued to surface throughout the year, researchers made headway in understanding the H5N1 virus, as well as how this microscopic bug could lead to the next flu pandemic.

But some say the response to the risk shows we are still woefully unprepared.

Although the virus has not yet led to a widespread pandemic influenza, sporadic news of outbreaks continues to test the containment efforts of governments and health organizations around the world.

Infectious Disease -- E. Coli Outbreaks Sicken Hundreds, Kill Several

From contaminated greens to tainted tacos, the series of E. coli outbreaks that began in August forced Americans to question the safety of their food supply.

Health officials blamed contaminated spinach for the first wave of sickness. However, the exact cause of the latest round of E. coli infections -- this time in several Taco Bell restaurants -- remains a mystery.
"It does teach us that our food supply is vulnerable," says John Clements, professor and chair of the department of microbiology and immunology at Tulane University School of Medicine.

Sexual Health -- HPV Vaccine Approved for Use

In June, the U.S. Food and Drug Administration announced its approval of Gardasil, a vaccine that prevents infection by some strains of the cervical-cancer-causing HPV. Preventing HPV infection could, in turn, reduce women's deaths from the disease, which total 270,000 worldwide and about 4,000 in the United States every year.

"The HPV vaccine, if widely used, has the potential to nearly eliminate cervical cancer and preinvasive neoplasia over the next 20 to 30 years," says Dr. Stephen Rubin, chief of the division of gynecologic oncology at the University of Pennsylvania. "We may be able to say goodbye to one of the world's major cancers, eliminated by a vaccine."

"When administered to adolescent girls, it will prevent the large majority of cases of cervical cancer," says Dr. Stephen Edge of the Roswell Park Cancer Institute at the University at Buffalo. "Now, this killer disease will largely be relegated to history."

Cardiology -- Rethinking Drug-Coated Stents

Doctors may be forced to reconsider drug-eluting stents for their heart patients after research showed that clotting problems are associated with their use.

An FDA panel of expert advisers found that when used in approved cases, drug-coated stents are safe and effective. However, since patients with conditions not specifically approved by the FDA for treatment with drug-coated stents make up nearly two-thirds of the cases in which the devices are used, millions of patients could be affected.

Some experts in the field note, though, that study and debate of this issue will continue well into 2007.

"This is a big story because so many hospitals jumped on this bandwagon with what some might view as a small number of trials," says Dr. John Sinnott of Tampa General Hospital. "We will hear more about this."

Bariatric Medicine -- Medicare To Cover Surgery

As of February, obese elderly or disabled patients became eligible for a variety of surgical weight loss procedures, such as gastric banding, under the U.S. Medicare health insurance plan.

The policy limited eligibility to patients with obesity-related medical problems who had already tried and failed other weight loss options; however, experts in the field believe this development could have wide implications for the future of weight loss medicine.

"This decision, combined with the increased girth of people, will result in a rise in the number of individuals getting gastric bypass or lap band," says Dr. Mitchell Roslin, chief of bariatric surgery at Lenox Hill Hospital in New York. "Furthermore, it makes it far more difficult for insurers to have exclusions for coverage for severe obesity. In other areas, private insurers have been forced to follow Medicare's lead."
Diet and Nutrition -- NYC Bans Trans-Fats

In December, New York became the first city in the country to ban artery-clogging trans-fats from the menus of all restaurants. Research had already implicated trans-fats as important contributors to heart disease, as they raise "bad" LDL cholesterol while lowering "good" HDL cholesterol.

Many predict other cities will follow the move; since the New York policy took effect, one Massachusetts lawmaker proposed a bill that would ban trans-fats from all the restaurants in the state. Experts in the field suggest the New York policy may be just the beginning of a nationwide shift towards healthier eating in restaurants -- possibly an important step in saving many people from heart disease.

Cancer -- Breast Cancer Rates Show Significant Drop

It could be that more women are going off hormone replacement therapy. Or, that fewer women are going in for mammograms. Either way, researchers found that the number of breast cancer cases detected has dropped dramatically in the past five years.

"There is strong evidence that the rate of death from breast cancer has dropped 25 percent over the last five years," says Edge. "This is really big news."

While some attributed the sharp drop to the fact that millions of women quit hormone replacement therapy, others had doubts that quitting HRT could alone produce such a steep drop.

Plastic Surgery -- Face Transplants Shown Viable

After the successful face transplant performed in France in November 2005, it appears that plastic and reconstructive surgeons have accepted facial transplantation as a viable and useful technique. In early 2006, another partial facial transplant was successfully carried out in China. And more could be on the way.

Now for the downside. Public opinion of the technique remains split, as many believe the act of transplanting a face comes attached with a host of medical and ethical conundrums. In addition, finding suitable brain-dead donors presents a recurring obstacle, say plastic surgery experts. In a report on the French operation, The New York Times said that the donor, a French woman in her 40s, likely hanged herself.

Plastic Surgery -- FDA Says Yes to Silicone Breasts

After a 14-year-long moratorium, silicone breast implants have once again become an option for women in the United States -- or for most of them, at least. The decision by the FDA made silicone implants available to all breast reconstruction and revision patients, as well as women 22 years of age and older seeking cosmetic breast enhancement.

The move, though strongly supported by professional plastic surgery organizations, was denounced by consumer groups and women's groups alike. Additionally, companies manufacturing the implants will have to address previous health concerns by conducting studies and a massive follow-up of a projected 40,000 women over the next 10 years, according to the FDA.

Ophthalmology -- New Drug for Common Cause of Blindness

http://abcnews.go.com/Health/print?id=2756819
In June, the FDA approved the first drug designed to treat age-related macular degeneration. Though most young people will not likely be familiar with the condition, for those who suffer from it, the new drug could mean the difference between blindness and sight.

The drug, called Lucentis, treats the so-called "wet" form of macular degeneration, the less common form of the disease. And while 85 to 90 percent of macular degeneration is actually the "dry" form, current estimates show more than 200,000 new patients diagnosed with wet AMD every year, according to statistics from the American Society of Retina Specialists.