

## DOE – Medical and Infectious Disease Update – Wednesday, June 09, 2004

DOE weekly updates on Bird Flu, Human Influenza, West Nile Virus, or other illnesses and medical issues will continue as appropriate or as requested. The following information is current as of Thursday, June 10, 2004, 0700 hours, EST. Information presented is routinely taken from the Centers for Disease Control and Prevention (**CDC**), <http://www.cdc.gov/>, The World Health Organization (**WHO**), <http://www.who.int/en/>, the Department of Defense Global Emerging Infections Surveillance and Response System site, (**DoD-GEIS**) - <http://www.geis.ha.osd.mil/>, and other creditable sources.

### Recent News

**ALLERGY-The Accuweather page** provides current air quality information with specific charts for **Grass Pollen**, **Overall Pollen**, **Ragweed Pollen**, and **Tree Pollen** ...  
[http://www.accuweather.com/adcbn/public/maps\\_index.asp?type=airq](http://www.accuweather.com/adcbn/public/maps_index.asp?type=airq).

### Summertime, When People and Parasites Head for the Water -

8June2004, by *James Gorman*, **The New York Times** --The more you know about microbiology, the harder it is to go swimming. The ocean not only has the odd macrobiotic sting ray and shark but various sorts of bacteria, dinoflagellates and viruses. That's in a healthy ocean. As Dr. Michael Beach (his real name), an epidemiologist in the parasitic disease section of the Centers for Disease Control and Prevention in Atlanta, said, "A lot of these bugs just live in the wild and we get in their way." Dr. Beach is involved in the healthy swimming campaign for the agency. The seashore and rivers, ponds and lakes are part of its concern, because they can certainly contain health hazards, even if they are not polluted. But the current focus is on pools and a parasite called cryptosporidium. Discussing the way it is spread is a really unpleasant job. But, the agency has decided, somebody has to do it. Here is something from one of their warning brochures. "Think about it!" the big type blurts. "You share the water with everyone in the pool. If someone with diarrhea contaminates the water, swallowing the water can make you sick." ... <http://www.nytimes.com/2004/06/08/health/08side.html> - (Note: The NY Times Web service is free but requires that you register on their site, a relatively painless process - Ed.).

### New Study Links Common Cholesterol-Lowering Drugs To Reduced Prostate Cancer Risk –

8June2004, **Science Daily**, PORTLAND, Ore. — Men who take even small amounts of common cholesterol-lowering drugs such as Lovastatin and Simvastatin have a significantly reduced risk of prostate cancer, according to a new study by Oregon Health & Science University Cancer Institute researchers. "If these results are confirmed in a larger prospective study, they may provide necessary evidence to consider the use of cholesterol-lowering drugs in prostate cancer prevention. Currently, no preventive measures are available for prostate cancer," said Jackilen Shannon, Ph.D., R.D., a ssistant professor of public health and preventive medicine in the OHSU School of Medicine, member of the OHSU Cancer Institute and lead author of the study ... <http://www.sciencedaily.com/releases/2004/06/040608065041.htm>.

**Sex virus link to cervical cancer** – 7June2004, **icSouthLondon** --The majority of people are ignorant about the link between cervical cancer and a common sexually-transmitted virus, research has revealed. The human papilloma virus (HPV) is linked to over 99% of cases of cervical cancer, but less than 1% of the public know this fact, according to a study by Cancer Research UK. The NHS is currently running a pilot study to see whether the addition of HPV testing could improve the current cervical screening programme in the UK ...

[http://icsouthlondon.icnetwork.co.uk/0100news/nationalnews/tm\\_objectid=14309593&method=full&siteid=50100&headline=sex-virus-link-to-cervical-cancer-name\\_page.html](http://icsouthlondon.icnetwork.co.uk/0100news/nationalnews/tm_objectid=14309593&method=full&siteid=50100&headline=sex-virus-link-to-cervical-cancer-name_page.html).

**Cilantro Slays Food Poisoning** – Updated 4June2004, by *Daniel DeNoon*, **WebMD** – Cilantro --those flavorful green specks in salsa -- kills germs that cause food poisoning. At the University of California, Berkeley, Isao Kubo, PhD, and colleagues found that salsa juice fights several

nasty germs. As any Mexican food aficionado knows, salsa contains tomatoes, onions, green chiles, and cilantro. But which one is the germ killer? Most of us would suspect the green chiles for burning up germs. But being chemists, Kubo and colleagues looked at cilantro. They knew this flavorful member of the parsley family is loaded with "volatile compounds" likely to affect bacteria. One of these compounds -- dodecenal -- turns out to be the main bug slayer. Kubo's team tested it against salmonella, a major cause of food poisoning. Dodecenal killed the germ better than the antibiotic gentamicin. The findings appear in the May 26 issue of the Journal of Agricultural and Food Chemistry ... <http://dailynews.att.net/cgi-bin/news?dt=040609&cat=diet&st=diet99638&src=webmd>.

### **Cells From Fat Tissue Turned Into Functional Nerve Cells –**

4June2004, **Science Daily**, DURHAM, N.C. --Two years after transforming human fat cells into what appeared to be nerve cells, a group led by Duke University Medical Center researchers has gone one step further by demonstrating that these new cells also appear to act like nerve cells. The team said that the results of its latest experiments provide the most compelling scientific evidence to date that researchers will in the future be able to take cells from a practically limitless source -- fat -- and retrain them to differentiate along new developmental paths. These cells, they said, could then be used to possibly treat a number of human ailments of the central and peripheral nervous systems. The results of the team's latest experiments were published June 1, 2004, in the journal *Experimental Neurology* ... <http://www.sciencedaily.com/releases/2004/06/040604030545.htm>.

### **Workplace stress taking its toll –**

3June2004, **The Washington Times**, Wilmington, DE, (UPI) -- One in three Americans may be making themselves sick just by going to work each day. Results from a new landmark study show differences in the way men and women are managed -- fueled by the differences in what they value most at work -- puts both genders at risk for cardiovascular problems, depression and a higher susceptibility to infectious diseases. The study indicates gender-based differences in workplace values can create a company culture of underlying stress and conflict that affects the physical and emotional health of both men and women. The study also shows women are at a higher health risk from workplace stress than men ...

<http://washingtontimes.com/upi-breaking/20040603-080526-6715r.htm>.

### **Researchers report major advance in gene therapy technique –**

3June2004, by [Dian Land](#), **The University of Wisconsin at Madison** --Despite a roller-coaster ride of ups and downs during the past 15 years, gene therapy has continued to attract many of the world's brightest scientists. They are tantalized by the enormous potential that replacing missing genes or disabling defective ones offers for curing diseases of many kinds. One group, consisting of researchers from the [Medical School](#), the [Waisman Center](#) and [Mirus Bio Corporation](#), now reports a critical advance relating to one of the most fundamental and challenging problems of gene therapy: **how to safely and effectively get therapeutic DNA inside cells**. The scientists have discovered a remarkably simple solution. They used a system that is virtually the same as administering an IV (intravenous injection) to inject genes and proteins into the limb veins of laboratory animals of varying sizes... <http://www.news.wisc.edu/9867.html>.

### **Bird Flu 2003-2004: Doe Special Medical Update –**

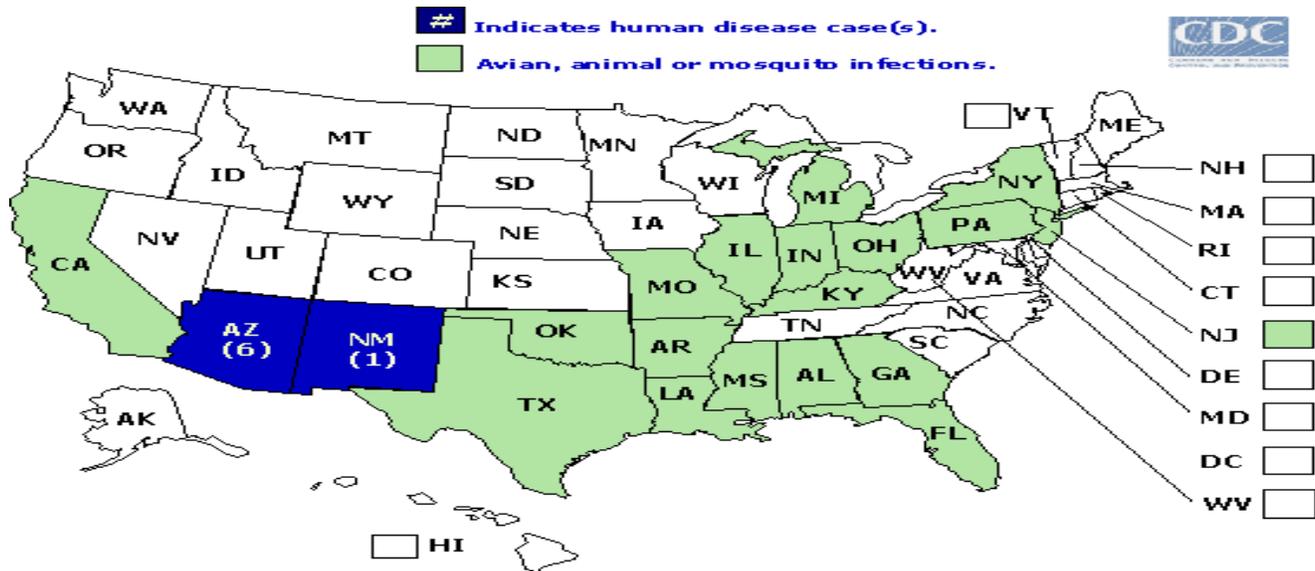
With information from WHO and the CDC, this update also explains the concepts of viral infection, viral replication, antigenic "drift", and antigenic "shift" ... [http://www.eh.doe.gov/health/news/BI RDFLU2003-2004\\_DOESPECIALUPDATE\\_B200402091.pdf](http://www.eh.doe.gov/health/news/BI RDFLU2003-2004_DOESPECIALUPDATE_B200402091.pdf) (PDF) or for a choice of PDF or Word format, <http://www.eh.doe.gov/health/index.html>, and scroll down under "News and Features".

### **WHO: Avian influenza -fact sheet –**

5January2004-Avian influenza ("bird flu") and the significance of its transmission to humans ... [http://www.who.int/csr/don/2004\\_01\\_15/en/](http://www.who.int/csr/don/2004_01_15/en/).

**2004 West Nile Virus Activity in the United States, reported to CDC.** Maps reporting WNV avian and veterinary activity occurring during 2004 are updated regularly.

**2004 West Nile Virus Activity in the United States  
(reported to CDC as of June 8, 2004\*)**



\*Currently, WNV maps are updated regularly to reflect surveillance reports released by state and local health departments to the CDC Arbonet system for public distribution. Map shows the distribution of avian, animal, or mosquito infection occurring during 2004 with number of human cases if any, by state. If West Nile virus infection is reported to CDC Arbonet in any area of a state, that entire state is shaded accordingly. **Human cases have been reported in New Mexico and Arizona.**

State	Neuroinvasive disease	Fever	Other Clinical/Unspecified	Total Human Cases Reported to CDC	Deaths
Arizona	3	1	2	6	
New Mexico		1		1	
<b>Total</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>7</b>	

[http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount04\\_detailed.htm](http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount04_detailed.htm)

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