

DOE – Medical and Infectious Disease Update – Wednesday, June 16, 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 17, 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, \(DoD-GEIS\)](http://www.geis.fhp.osd.mil/), and other credible sources.

Recent News

West Nile Virus Activity – Through 15 June 2004, there have been a total of 14 cases, 10 cases in Arizona. See page 3 of this update for details.

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.

Cholesterol Meds Fight Glaucoma, Too – 15 June 2004, HealthDayNews --Long-term use of cholesterol-lowering medications called statins may reduce the risk of [glaucoma](#), especially in people with cardiovascular disease and high cholesterol, says a study in the June issue of the journal Archives of Ophthalmology. Experts estimate that 2.2 million Americans over 40 years of age suffer from glaucoma, an eye disease characterized by increased pressure in the eye. University of Alabama at Birmingham researchers studied the medical records -- including use of statins and other cholesterol-lowering drugs -- of 667 men aged 50 or older who had been newly diagnosed with glaucoma. They compared them to 6,667 men of similar age without glaucoma. Men who used statins for more than two years had a significantly reduced risk of glaucoma, the researchers found. The risks were also lower in men who took nonstatin cholesterol-lowering drugs, they add ...
http://story.news.yahoo.com/news?tmpl=story&cid=97&ncid=751&e=8&u=hsn/20040615/hl_hsn/cholesterolmedsfightglaucomatoo.

New Technique Developed At UCSD For Deciphering Brain Recordings Can Capture Thinking As It Happens – 15 June 2004, By Sherry Seethaler, UCSD --A team led by [University of California San Diego](#) neurobiologists has developed a new approach to interpreting brain electroencephalograms, or EEGs, that provides an unprecedented view of thought in action and has the potential to advance our understanding of disorders like epilepsy and autism. The new information processing and visualization methods that make it possible to follow activation in different areas of the brain dynamically are detailed in a paper featured on the cover of the June 15 issue of the journal Public Library of Science Biology (plos.org) The significance of the advance is that thought processes occur on the order of milliseconds—thousandths of a second—but current brain imaging techniques, such as functional Magnetic Resonance Imaging and traditional EEGs, are averaged over seconds. This provides a “blurry” picture of how the neural circuits in the brain are activated, just as a picture of waves breaking on the shore would be a blur if it were created from the average of multiple snapshots ...
<http://ucsdnews.ucsd.edu/newsrel/science/sneweegs.asp>.

MIT Technology Jump-Starts Human Embryonic Stem Cell Work – 14 June 2004, **Science Daily**, CAMBRIDGE, Mass. --An MIT team has developed new technology that could jump-start scientists' ability to create specific cell types from human embryonic stem cells, a feat with implications for developing replacement organs and a variety of other tissue engineering

applications. The scientists have already identified a simple method for producing substantially pure populations of epithelial-like cells from human embryonic stem cells. Epithelial cells could be useful in making synthetic skin ... <http://www.sciencedaily.com/releases/2004/06/040614075123.htm>.

New Non-aspirin Pain Drug Proves Effective Against Recurrent Prostate Cancer

– 2004-06-10, **Science Daily**, CHAPEL HILL --Early results from a University of North Carolina at Chapel Hill School of Medicine study may determine if drugs called Cox-2 inhibitors, a newer type of non-aspirin pain medicine now widely prescribed for arthritis symptoms, may benefit men with recurrent prostate cancer. The new findings demonstrate that Cox-2 inhibitors may have anti-tumor effects on prostate cancer and may slow disease progression in men whose PSA blood tests indicate the cancer's recurrence, the researchers said. Findings were presented June 6 at the American Society of Clinical Oncology's annual meeting. Currently, no effective treatment options exist for the estimated 50,000 men who annually develop the first signs of cancer recurrence - called biochemical relapse, a detectable and rising PSA level after surgery or radiation therapy for prostate cancer. For these otherwise healthy individuals, the first clinical signs of cancer relapse may be years ahead ... <http://www.sciencedaily.com/releases/2004/06/040610074916.htm>.

Scientists Isolate New Stem Cell Lines: Could Help Genetic

Disease Research – 2004-06-09, **The Associated Press**, CHICAGO June 9, 2004 -Scientists at a private Chicago fertility clinic say they have isolated 12 new stem cell lines from genetically flawed human embryos an advance that could help research into cures for devastating inherited diseases. The cell colonies came from unused embryos donated by couples who underwent prenatal genetic screening at Reproductive Genetics Institute, clinic president Yury Verlinsky said Wednesday. The embryos had gene mutations for two forms of muscular dystrophy, certain blood diseases and a cause of mental retardation seven diseases in all. Because of stem cells' unique properties, isolating and studying the cells from those embryos could help researchers better understand genetic diseases and develop new treatments or cures, experts said ... http://abcnews.go.com/wire/US/ap20040609_2010.html.

Perfectionism Can Lead To Imperfect Health: High Achievers More Prone To Emotional, Physical And Relationship Problems

– 1June2004, TORONTO, --[York University](http://www.yorku.ca) psychology professor Gordon Flett says that perfectionists are prone to health problems because they are under constant stress. Flett and a team of Canadian researchers in a landmark study have developed a 45-item questionnaire to identify the three types of perfectionists: self-oriented perfectionists (expect perfection of themselves); other-oriented perfectionists (demand perfection from other people); and socially prescribed perfectionists (think others expect perfection from them). The Multidimensional Perfectionism Scale, as it is also known, was just published this week by Multi-Health Systems Inc., based in Toronto. It is the first published scale that focuses specifically on perfectionism from a multidimensional perspective ... <http://www.yorku.ca/mediar/archive/Release.asp?Release=632>.

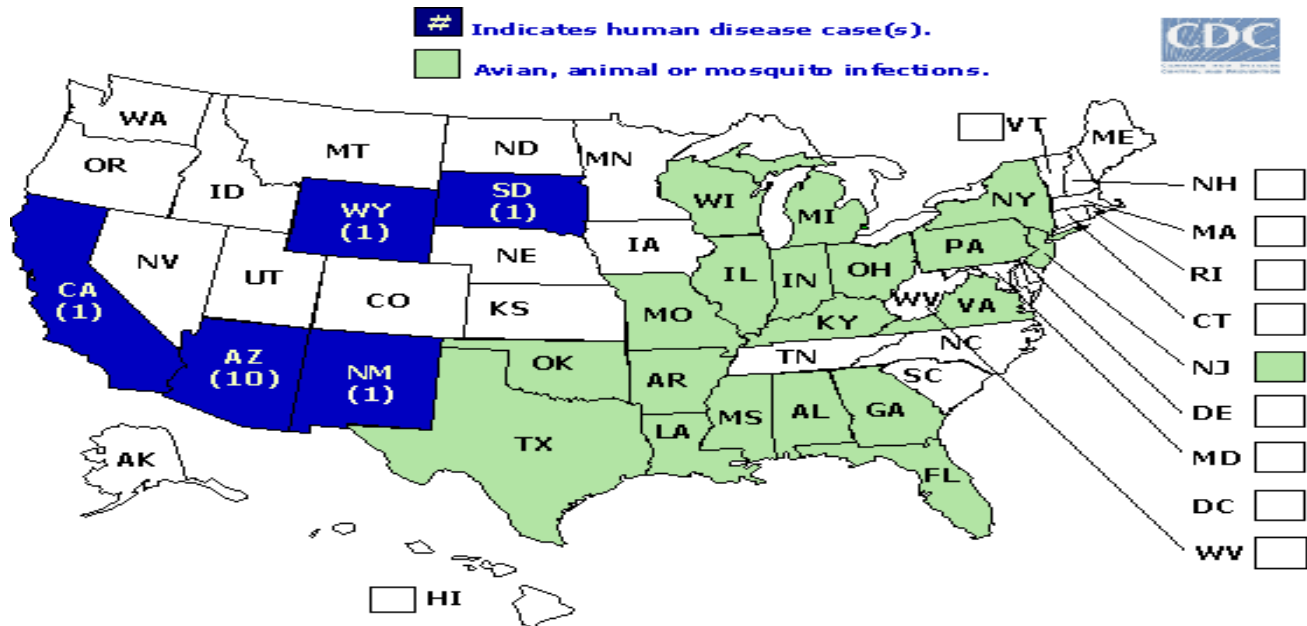


Bird Flu 2003-2004: Doe Special Medical Update – With information from WHO and the CDC, this update also explains the concepts of viral infection, viral replication, antigenic “drift”, and antigenic “shift” ... http://www.eh.doe.gov/health/news/BI RDFLU2003-2004_DOESPECIALUPDATE_B200402091.pdf .

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/.

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. **For the week ending 15 June 2004, there were a total of 7 new cases.**

**2004 West Nile Virus Activity in the United States
(reported to CDC as of June 15, 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 Arizona, California, New Mexico, South Dakota and Wyoming.

State	Neuroinvasive disease	Fever	Other Clinical/ Unspecified	Total Human Case s Reported to CDC	Deaths
Arizona	8	2	0	10	0
California	0	1	0	1	0
New Mexico	0	1	0	1	0
South Dakota	1	0	0	1	0
Wyoming	0	1	0	1	0
Total	9	5	0	14	0

http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount04_detailed.htm

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