**One Health News Bits**

**2-23-12**

[**New projection shows global food demand doubling by 2050**](http://www.nsf.gov/news/news_summ.jsp?cntn_id=122293&org=NSF&from=news)

Global food demand could double by 2050, according to a new projection reported this week in the journal Proceedings of the National Academy of Sciences (PNAS).Scientists David Tilman and Jason Hill of the University of Minnesota (UMN) and colleagues found that producing the amount of food needed could significantly increase levels of carbon dioxide and nitrogen in the environment, and may cause the extinction of numerous species. (11/21)

[**Adopted stray becomes family’s unofficial therapy dog**](http://www.whptv.com/news/local/story/Heroic-local-dog-was-featured-on-Animal-Planet/GI44YcAGy0aBRM9Q-5PxOQ.cspx)

When a Pennsylvania family adopted a dog abandoned in a dumpster, the owners never guessed that Jack, a terrier mix, would one day save their daughter’s life and go on to be featured on Animal Planet’s television show “Saved.” But after Jack frantically scratched at the then-6-year-old girl’s door when she was having a seizure, the family realized he was special. Since then, Jack has become the child’s constant companion, notifying the family before a seizure strikes. (11/29)

[**Chimpanzees use food as medicine**](http://news.discovery.com/animals/chimps-self-medicate-111129.html)

Researchers found that chimpanzees ingest certain plants specifically for the medicinal benefits, just like humans, including plants that are anti-tumor and anti-bacteria. Additional research reveals that goats and spider monkeys also use plants for purposes other than nutrition. (11/29)

[**Veterinarians train Vietnamese pathologists to detect emerging diseases**](http://smithsonianscience.org/2011/11/national-zoo-veterinarian-suzan-murray-is-helping-stop-pandemics-in-disease-hot-spots-around-the-world/)

Suzan Murray, chief veterinary medical officer at the Smithsonian’s National Zoological Park, trained Vietnamese pathologists to detect emerging zoonotic disease as part of PREDICT, one arm of the U.S. Agency for International Development’s Emerging Pandemic Threats program. “Our goal…is to prepare and train the next generation of ‘one-health’ professionals, which will include pathologists, to conduct surveillance, recognize and catch these viruses early, before they become the next pandemic,” said Dr. Murray. (11/29)

[**Australia opens new state-of-the-art biosecurity lab to study zoonotic diseases**](http://www.cosmosmagazine.com/news/5030/australia-opens-worlds-leading-biosecurity-lab)

The new lab is the latest jewel in the crown of the Australian Animal Health Laboratory (AAHL). AAHL has been a lead actor on the global epidemic stage since it opened its doors in 1985. Originally designed to protect Australia's cattle industry from devastating outbreaks like foot and mouth disease, it has since 1994, become a one-stop-shop for human and animal diseases. That's when Hendra virus jumped from horses to kill humans. "There is an urgent need to move forward with a 'One Health' approach, which links human, animal and environmental health professionals together," said AAHL Director Martyn Jeggo. (11/29)

[**Rats and cats cooperate to detect landmines**](http://www2.wkrg.com/news/2011/nov/30/cats-mice-working-together-ar-2778124/)

Officials in Colombia have trained rats to detect landmines planted by gangs and guerrilla groups over the years, which killed more than 500 people in 2010. Cats are trained to protect the rats from predators as they search fields for mines. (11/30)

[**Scientists discover potential remedies in new species**](http://www.thejakartaglobe.com/news/scientists-in-sulawesi-discover-new-species-hidden-in-mountains/481921)

University of California scientists and researchers in Indonesia are conducting a long-term, long-range expedition in Indonesia’s Mekonga mountain range collecting vertebrate, plant and microbial samples, which have yielded new species discoveries that could help ease human ailments. “We are finding potential activity in the plants and microbes…that have potential for anti-cancer activity, potential effects on the nervous system, they might be new pain relievers or things for treating addictions,” one researcher said. (12/1)

[***Observing animals may help predict earthquakes***](http://www.bbc.co.uk/nature/15945014)

Scientists theorize that animals may detect ionic changes to rocks and waterways days to weeks ahead of major natural events, such as earthquakes. If they can identify the factors animals react to, scientists may be able to develop a means to predict earthquakes. (12/1)

[**Orangutans receive flu vaccine**](http://pittsburgh.cbslocal.com/2011/12/01/orangutans-at-pittsburgh-zoo-get-flu-shots/)

Orangutans at the Pittsburgh Zoo and PPG Aquarium receive shots to protect them from people. The vaccination is actually for the human flu, as it can be passed from people to the great apes, gorillas, and orangutans at the zoo. Dr. Ginny Takle, director of animal health, recognizes these orangutans as being active partners of their health care program. (12/1)

[**Minnesota scientists research novel approaches to canine cancer**](http://www.mndaily.com/2011/12/05/new-studies-help-extend-lives-dogs-cancer)

University of Minnesota researcers are studying new treatments for canince caner, including osteosarcoma and lymphoma, which, if successful, could be helpful for humans with the same conditions. The osteosarcoma study, one of the five active cancer studies, involves using altered salmonella to attack cancer cells, and the lymphoma study tests a drug that is thought to decrease resistance to chemotherapy agents. (12/5)

[**Creutzfeldt-Jakob disease case is linked to surgical implant**](http://english.yonhapnews.co.kr/business/2011/12/08/51/0502000000AEN20111208002700320F.HTML)

A south Korean man has been diagnosed with Creutzfeldt-Jakob disease, the country’s second case ever, and likely contracted the disease from surgical tissue graft material that contained defective prions. The country’s only other case of CJD involved a patient who had also received a tissue graft years before being diagnosed with the terminal disease. (12/8)

[**CDC reports 2 new human swine-origin influenza cases**](http://www.winnipegfreepress.com/breakingnews/us-sees-2-new-human-infections-with-swine-influenza-viruses-cdc-reports-135334578.html)

The CDC has confirmed two new cases of suspected human-to-human transmission of the swine-origin influenza strains H3N2 and H1N2, one in West Virginia and the other in Minnesota. Swine-origin flu cases have surfaced recently in five states, making officials think the virus is passing “at low levels” among people. Officials are monitoring the reported flu strains across the country. (12/9)

[**2 Florida horses die from EEE**](http://www.cfnews13.com/article/news/2011/december/356019/2-horses-die-from-Eastern-Equine-Encephalitis)

Health officials in Florida have confirmed that two horses died as a result of Eastern equine encephalitis. Officials are concerned for other horses in the area but also for humans, who can contract the illness from mosquitoes. (12/9)

[**Animal feces poses health risks for pets and humans**](http://www.huffingtonpost.com/2011/12/09/dog-poop-scoop-infectious-disease_n_1138618.html)

Contrary to the beliefs of some, animal feces should not be left to dry and become a permanent part of the environment because it may harbor many infectious agents such as giardia, roundworms and toxoplasmosis, all of which can infect both pets and people. Picking up feces immediately, sealing it in a plastic bag and placing it in the trash along with veterinarian-directed parasite control is the best way to prevent the spread of zoonotic disease from animal feces. (12/9)

[**Schools pool resources to advance human and animal health**](http://www2.journalnow.com/business/2011/dec/10/wsbiz01-universities-announce-regenerative-medicin-ar-1698305/)

The regenerative medicine collaboration between Wake Forest Baptist Medical Center and N.C. State University is taking an engineering approach in hopes of bringing replacement organs and tissues to consumers more quickly. Wake's Institute for Regenerative Medicine is working with NCSU's Fitts Department of Industrial and Systems Engineering on the project. The collaboration will also focus on meeting Food and Drug Administration regulations and submitting new manufacturing concepts for regenerative medicine products and tissues for approval. (12/10)

[**CSU research aims to cut livestock industry’s air impact**](http://www.journal-advocate.com/ci_19554068?source=most_viewed)

A nationwide project led by Colorado State University researchers aims to help livestock producers reduce airborne emissions that could degrade environmental health. Agriculture's airborne emissions - whether dust, odor, methane or ammonia - often are the source of controversy when these byproducts provoke tension between rural and urban neighbors, or when they are eyed as possible environmental threats. (12/15)

[**South Carolina woman is infected with rabies**](http://www.wyff4.com/news/30013522/detail.html)

South Carolina health officials announced that a woman confirmed to have rabies was likely infected by a bat in her home a few months ago. Human cases of rabies are extremely rare, with only one to three occurring annually in the U.S. This is South Carolina’s first human case in more than half a century. Authorities are investigating whether family members and friends may have been exposed to the deadly virus. (12/16)

[**Medical marijuana sales lead to increase in dog poisonings**](http://durangoherald.com/article/20111218/NEWS01/712189903/-1/s)

Colorado veterinarians have seen an increase in marijuana poisonings in dogs as medical use of the drug for humans has increased. Although not deadly for dogs, marijuana causes issues such as incoordination, urine dribbling, confusion and a slow heart which can render the dog unable to eat or drink. Veterinary care is needed in such cases. The AVMA has increased efforts to prevent pets from ingesting over-the-counter human medications and to promote proper disposal of such drugs. (12/18)

[**$4 Million is allotted to fight deadly bat white-nose syndrome**](http://coloradoindependent.com/108288/congress-goes-batty-omnibus-bill-commits-4-million-to-combat-white-nose-syndrome)

Congress has approved $4 million in funding to study white-nose syndrome, a fungal disease that is rapidly decimating North American bat populations, putting agriculture at risk because bats keep crop-killing insects in check. “The high number of bat deaths and range of species being affected far exceeds the rate and magnitude of any previously known natural or human-caused mortality event in bats, and possibly in any other mammals,” says a U.S. Geological Survey research scientist Paul Cryan. (12/19)