**One Health News Bits**

Feb 22, 2013

[**Gene-tweaked tomatoes, probiotics aim to lower your cholesterol**](http://consumer.healthday.com/Article.asp?AID=670361)

People who took a probiotic supplement containing a beneficial bacteria saw their cholesterol levels improve, and a freeze-dried concoction made from a genetically engineered tomato had a similar effect on mice, two new studies show. (11/5) <http://consumer.healthday.com/Article.asp?AID=670361>

[**Mont. seeks to control elk population in fight against brucellosis**](http://www.sfgate.com/news/science/article/Montana-considers-elk-reductions-to-curb-disease-4019792.php#ixzz2Cc7KykwQ)

A broad plan to protect against animal disease around Yellowstone National Park by targeting infected elk herds gained initial approval Thursday from Montana wildlife commissioners. The plan includes measures to reduce the size of some elk herds, haze the animals away from livestock and even erect elk-proof fending. It was drafted by a state-appointed citizens working group. (11/8) <http://www.sfgate.com/news/science/article/Montana-considers-elk-reductions-to-curb-disease-4019792.php#ixzz2Cc7KykwQ>

[**Tests, treatments for tuberculosis**](http://www.cvmbs.colostate.edu/ns/pubs/einsight/2012/september/gates-foundation-tb-research-grants.aspx)

Tuberculosis may be an afterthought for many in the developed world, but the truth is that the bacterium that causes tuberculosis is alive and well in many other countries, causing 1.4 million new cases each year. Scientists at the Colorado State University College of Veterinary Medicine & Biomedical Sciences are known for their groundbreaking research into the disease. Thanks to [several grants](http://echo4.bluehornet.com/ct/18500254:21013162843:m:1:2008126168:1BFA7115AC8F4F4E69EC536F7FB300CC:r) from the [Bill & Melinda Gates Foundation](http://echo4.bluehornet.com/ct/18500255:21013162843:m:1:2008126168:1BFA7115AC8F4F4E69EC536F7FB300CC:r), this esteemed team is now developing everything from models that better mimic the impact of tuberculosis infection in humans to tuberculosis-detecting tests that can be used in countries with few resources. (9/1) <http://www.cvmbs.colostate.edu/ns/pubs/einsight/2012/september/gates-foundation-tb-research-grants.aspx>

[**Giving your pet the flu**](http://oregonstate.edu/ua/ncs/archives/2012/oct/onset-flu-season-raises-concerns-about-human-pet-transmission)

The concept is called "reverse zoonosis," and it is still poorly understood. But veterinarians are concerned that pets may be getting sick from their owners, and not the other way around. While new strains of flu can evolve from animal populations and ultimately move into human populations, it now appears that humans have passed the H1N1 flu to cats and other animals, some of which have died of respiratory illness. The phenomenon raises troubling questions – and few answers – for veterinarians. Veterinary researchers at Oregon State University and Iowa State University are working to [find more cases](http://echo4.bluehornet.com/ct/18500259:21013162843:m:1:2008126168:1BFA7115AC8F4F4E69EC536F7FB300CC:r) of this type of disease transmission so that they can better understand the risks they may pose to people and pets.  (10/3) <http://oregonstate.edu/ua/ncs/archives/2012/oct/onset-flu-season-raises-concerns-about-human-pet-transmission>

[**Deer ticks found to harbor more than Lyme disease**](http://www.ibtimes.com/new-scary-tick-borne-diseases-march-875708)

Yale University researchers recently found that the deer tick, known to carry and transmit Lyme disease to animals and people, also harbors Babesia microti and likely transmits more deer tick virus to humans than previously thought. Furthermore, the researchers found the Lyme parasite bolstered B. microti populations. "We increasingly need to apply the most sophisticated genetic tools to identify the numerous new tick-borne microbes that have the theoretical capacity to infect humans," said researcher Sam Telford of Tufts University's Cummings School of Veterinary Medicine. (11/13) <http://www.ibtimes.com/new-scary-tick-borne-diseases-march-875708>

[**How Superstorm Sandy affected animals**](http://blogs.webmd.com/pet-tales/2012/11/animals-were-affected-by-the-hurricane-too.html)

Veterinarian Ann Hohenhaus relates some stories of how animals weathered Superstorm Sandy, noting that their plight paralleled that of humans. Although New York City encouraged owners to bring their animals with them during evacuations, city shelters recently reported 141 animals still unclaimed in the aftermath of the storm. Dr. Hohenhaus recounts how other animals, including the Chincoteague Island ponies, marine animals at the New York Aquarium, and even two displaced brown pelicans, fared during the storm. (11/16) <http://blogs.webmd.com/pet-tales/2012/11/animals-were-affected-by-the-hurricane-too.html>

[**Deer ticks found to harbor more than Lyme disease**](http://www.ibtimes.com/new-scary-tick-borne-diseases-march-875708)

At the annual meeting of the American Society and Tropical Medicine and Hygiene, Yale University researchers presented work on babesiosis, a malaria-like disease spread by a parasite that attacks red blood cells. The deer tick, which also spreads Lyme disease, is the most common vector for the babesiosis parasite, Babesia microti. The research suggests that babesiosis is on the rise.  (11/13) <http://www.ibtimes.com/new-scary-tick-borne-diseases-march-875708>

[**Researchers work toward new foot-and-mouth vaccine**](http://www.bbc.co.uk/news/uk-scotland-edinburgh-east-fife-20393481)

A team led by researchers from St. Andrews University in Scotland has launched a five-year study aimed at developing a new vaccine for foot-and-mouth disease in livestock. The highly contagious virus infects cattle, sheep, pigs and goats, millions of which were destroyed during a 2001 epidemic in the U.K. Researchers hope to create an easier-to-administer vaccine. (11/19) <http://www.bbc.co.uk/news/uk-scotland-edinburgh-east-fife-20393481>

[**Studies suggest even low-level oil spill exposure is harmful**](http://www.sciencenews.org/view/generic/id/346573/description/Gulf_spill_harmed_small_fish_studies_indicate)

Scientists studying the effects of the explosion of BP's Deepwater Horizon well and the subsequent oil spill two years ago say their findings show that very low levels of exposure to weathered oil for brief periods are enough to kill many fish embryos and hatchlings. Many species were exposed to the spill, from large tuna to tiny killifish. Fish in the study that were exposed to oil demonstrated defects such as heart abnormalities that pose a threat to their long-term survival. (11/19) <http://www.sciencenews.org/view/generic/id/346573/description/Gulf_spill_harmed_small_fish_studies_indicate>

[**Ape study points to biological basis for midlife crisis**](http://abcnews.go.com/blogs/health/2012/11/19/apes-have-midlife-crises-too/)

Chimpanzees and orangutans appear to experience midlife crises similar to those that humans often go through, according to new research published in the Proceedings of the National Academy of Sciences. "This is one more example showing that we may be more related to our non-human primates than we think," said researcher Nadine Kaslow of Emory University's psychiatry department. (11/19) <http://abcnews.go.com/blogs/health/2012/11/19/apes-have-midlife-crises-too/>

[**The animal-world advantages of being big**](http://www.lifeslittlemysteries.com/3078-animal-size-versus-climate.html)

Many vertebrates follow the pattern of growing larger in colder climates known as Bergmann's Rule, giving them a smaller surface-area-to-volume ratio that helps minimize loss of body heat. But experts say there are other upsides to being big in cold weather, and factors such as sexual selection, fat storage and food availability can drive body size. And for some species, the pattern is the opposite: Certain ectothermic animals are smaller in cooler climes and larger in warmer environments. (11/20) <http://www.lifeslittlemysteries.com/3078-animal-size-versus-climate.html>

[**Canine post-traumatic stress recognized as disorder**](http://articles.latimes.com/2012/nov/26/nation/la-na-military-dogs-20121126)

Veterinarians and dog handlers at Lackland Air Force Base in Texas who work with and train combat canines believe dogs are susceptible to post-traumatic stress disorder. Veterinarian Walter Burghardt Jr. estimates that at least one-tenth of dogs returning from active duty have the disorder, which is characterized by sudden attitude changes and inability to perform tasks that were previously routine. Many of the dogs can be rehabilitated with treatment ranging from behavioral training to medication, but some must be retired from military work. (11/26) <http://articles.latimes.com/2012/nov/26/nation/la-na-military-dogs-20121126>

[**mRNA influenza vaccine protects animals, study finds**](http://news.sciencemag.org/sciencenow/2012/11/making-a-flu-vaccine-without-the.html)

German researchers have found that an H1N1 vaccine based on synthetic messenger RNA provided immunity to mice, pigs and ferrets. Unlike the standard protein-based vaccine, the mRNA formulation can be mass-produced in eight weeks or less, doesn't need refrigeration and could be used in people who are allergic to the chicken-egg protein ovalbumin. More work is needed, but the researchers are hopeful the mRNA-based influenza vaccine may help protect people. (11/26) <http://news.sciencemag.org/sciencenow/2012/11/making-a-flu-vaccine-without-the.html>

[**Google data, weather modeling help predict influenza trends**](http://www.latimes.com/news/science/sciencenow/la-sci-sn-model-flu-outbreaks-google-search-data-20121126,0,4059029.story)

Combining analytical models from weather forecasting with constantly updating Google Flu Trends data, researchers can predict the next influenza outbreak up to seven weeks ahead of time. Such information could help public health organizations anticipate outbreaks and mobilize resources such as vaccines. (11/26) <http://www.latimes.com/news/science/sciencenow/la-sci-sn-model-flu-outbreaks-google-search-data-20121126,0,4059029.story>

[**NC fair, petting farm sued over outbreak of E.coli**](http://www.charlotteobserver.com/2012/11/27/3689809/lawsuit-targets-fair-petting-zoo.html)

Attorney Bill Marler filed suit in Cleveland County, N.C., against a local fair and petting zoo involved in an E. coli outbreak that sickened 106 people and killed one child earlier this year. A fair representative noted hand-washing stations were available and signs throughout the fair reminded visitors to wash their hands, but Marler believes further steps are needed to prevent future outbreaks. (11/26) <http://www.charlotteobserver.com/2012/11/27/3689809/lawsuit-targets-fair-petting-zoo.html>

[**Mass.dog protected by restraining order**](http://www.wickedlocal.com/marshfield/newsnow/x1671795007/Marshfield-dog-is-first-in-state-to-win-protection-under-a-restraining-order-for-domestic-violence#axzz2DXn0Nhhm)

For the first time in Massachusetts, a restraining order has been granted to protect a dog from domestic abuse. A woman who, with her 2-year-son, fled an abusive boyfriend was granted a restraining order protecting her dog from the man, prohibiting him from claiming the animal. Some 70% of victims of domestic violence report their abusers threaten to hurt or kill a pet as a way to manipulate the victims into staying or to prevent them from calling authorities, according to animal control officer Deni Michele Goldman.  (11/28) <http://www.wickedlocal.com/marshfield/newsnow/x1671795007/Marshfield-dog-is-first-in-state-to-win-protection-under-a-restraining-order-for-domestic-violence#axzz2DXn0Nhhm>

[**Bennett Aerospace uses trained insects to detect bedbugs**](http://www.businesswire.com/news/home/20121130005113/en/Bennett-Aerospace-Trained-Insects-Detect-Bedbugs)

Smart Hound™ technology has the potential to redefine how consumers can monitor for and detect bedbugs—but if you want the ability to regularly scan for bedbugs, you have to tell Bennett Aerospace via their crowdsourcing campaign on IndieGoGo. “Our technology, derived from US Department of Defense R&D on explosives detection, can put the ability to detect bedbugs directly in the hands of consumers,” says Julia Bennett, the CEO of Bennett Aerospace. And consumers are going to have to vote via crowdsourcing. (11/30) <http://www.businesswire.com/news/home/20121130005113/en/Bennett-Aerospace-Trained-Insects-Detect-Bedbugs>

[**Zoonotic diseases are all around us**](http://www.slate.com/articles/health_and_science/pandemics/2012/12/origins_of_new_diseases_zoonotic_pandemics_come_from_bats_birds_monkeys.html)

Three-quarters of emerging infectious diseases originate in animals, research suggests, as do widespread pathogens such as HIV, writes University of Iowa epidemiologist Tara Smith. She explores the connections between animal species and zoonoses including influenza, rabies, SARS and hantavirus. Smith points out that humans can also transmit pathogens to animals. For example, research has indicated humans can pass antibiotic-resistant Staphylococcus aureus to animals including chickens, dolphins and pigs. (12/4) <http://www.slate.com/articles/health_and_science/pandemics/2012/12/origins_of_new_diseases_zoonotic_pandemics_come_from_bats_birds_monkeys.html>

[**Vaccine developed to prevent Hendra virus infection**](https://www.avma.org/news/javmanews/pages/121215f.aspx?utm_source=javma-news&utm_medium=email)

A vaccine against the deadly Hendra virus in Australia became available Nov. 1, thanks to international collaboration by laboratories, governments, and industry. The zoonotic infectious disease has claimed the lives of 81 horses on the continent and killed three people. The vaccine is being recommended for all horses and veterinarians in Australia. (12/15) <https://www.avma.org/news/javmanews/pages/121215f.aspx?utm_source=javma-news&utm_medium=email>

[**Feral cat exposes people and pets to rabies**](http://savannahnow.com/latest-news/2012-12-06/least-10-people-2-dogs-exposed-rabies#.UQd-67-5OSp)

At least 10 people and two pet dogs have been exposed to rabies after coming into contact with an infected feral cat. Savannah-Chatham police’s Animal Control unit has been in contact with the 10 people known to have been exposed to the virus and are urging anyone else who may have been scratched, bitten or in general contact with the adult white and grey tabby to immediately seek medical attention. (12/6) <http://savannahnow.com/latest-news/2012-12-06/least-10-people-2-dogs-exposed-rabies#.UQd-67-5OSp>

[**Dog prompts boy to speak for the first time**](http://health.yahoo.net/experts/dayinhealth/dog-who-teaches-kids-talk)

A therapy dog named Boo helped a 6-year-old boy with selective mutism start talking. The boy, Marc Oliviere, hadn't spoken a single word to anyone until he met Boo. After their first therapy session, Marc released a flood of words and hasn't stopped, according to his mother.  (12/10) <http://health.yahoo.net/experts/dayinhealth/dog-who-teaches-kids-talk>

[**Diabetes service dogs can save lives, restore sense of normalcy**](http://online.wsj.com/article/SB10001424127887324001104578163423121970336.html?mod=dist_smartbrief)

Dogs trained to detect critical changes in blood glucose levels are helping improve the lives of people with type 1 diabetes. As incidence of the condition has increased, so has the need for glucose-detecting dogs, and organizations that train the dogs are swamped with requests, despite the $20,000 price tag. The mother of an 8-year-old with type 1 diabetes calls the service dogs "angels with fur."  (12/10) <http://online.wsj.com/article/SB10001424127887324001104578163423121970336.html?mod=dist_smartbrief>

[**Poaching is a national security issue, WWF study finds**](http://www.ibtimes.com/why-wildlife-poaching-big-problem-even-if-you-dont-care-about-rhinos-934396)

Poaching of wild animals for ivory, horns, skins and other parts has been a dangerous business for animals for decades, but it's evolved into a security threat as well, according to a WWF report. Elaborate criminal syndicates that protect and augment the trade have developed, the report found. "It is one thing to be worried about the traditional poachers who come in and kill and take a few animals, a few tusks, a few horns or other animal parts," said Secretary of State Hillary Clinton. "It's something else when you've got helicopters, night vision goggles, automatic weapons, which pose a threat to human life as well as wildlife." (12/12) <http://www.ibtimes.com/why-wildlife-poaching-big-problem-even-if-you-dont-care-about-rhinos-934396>

[**Underwater navigation technology modeled after Blind Cave Fish**](http://www.sciencedaily.com/releases/2012/12/121212092635.htm)

Scientists have created affordable, easily powered underwater navigational systems by using as a model sensory tissue found on Blind Cave Fish, a species that can swim rapidly while avoiding obstacles. The sensors use water pressure and flow information to direct movement, an approach that is much less expensive than lights and cameras and does not pose the possible harm to marine animals of sonar. Applications of the new technology include better water ecology monitoring and military defense capabilities. (12/12) <http://www.sciencedaily.com/releases/2012/12/121212092635.htm>

[**One Health and its importance to wildlife**](http://veterinaryrecord.bmj.com/content/171/24/613.full.html)

The importance of the One Health movement to the sustainability of wildlife populations was among subjects discussed at a recent symposium organized by the Veterinary Association for Wildlife Management (VAWM). Under the theme of ‘Wildlife diseases and conservation’, the symposium also considered issues such as pet travel and vectorborne diseases, poisoning of predatory birds and cetacean strandings. (12/15) <http://veterinaryrecord.bmj.com/content/171/24/613.full.html>

Veterinary Record2012;171:613-614.

[**Massive squid strandings may be related to red tide toxin**](http://www.livescience.com/25550-mass-squid-suicide.html)

Researchers struggling to explain why Humboldt squid strand themselves on central California beaches by the thousands noted that the strandings correspond with outbreaks of red tide and suspect that low levels of the toxin domoic acid disorient the animals. The toxin binds to glutamate receptors in the brain, and humans who ingest contaminated shellfish can suffer memory loss. (12/15) <http://www.livescience.com/25550-mass-squid-suicide.html>

[**Dogs help Newtown heal**](http://news.discovery.com/animals/dogs-sent-to-newtown-to-comfort-grieving-121217.html)

Animal lovers will attest to the power of a four-legged friend when there are no words to ease the pain.

A group of golden retrievers traveled from Illinois to Newtown, Connecticut, the day after a gunman killed 27 people in the tight-knit community. The town is mourning 20 children and six adults who were victims of the mass shooting in Sandy Hook Elementary School, and the shooter’s mother who was killed in her home. The organization Lutheran Church Charities brought the dogs to give comfort to anyone there in need. Chewy, Ruthie, Abbi, Prince, Luther, Maggie, Hanna, Barney, and Shanni are the therapeutic canines offering a calm, loving presence. They give children and adults a reason to smile after disasters and crisis. (12/17) (<http://ac360.blogs.cnn.com/2012/12/17/tonight-on-ac360-dogs-help-newtown-heal/?hpt=ac_t1>) (<http://news.discovery.com/animals/dogs-sent-to-newtown-to-comfort-grieving-121217.html>)

[**Foot and Mouth outbreak inevitable, veterinarian says**](http://www.farmandranchguide.com/feature/livestock_guide/us-livestock-industry-needs-to-be-prepared-for-fmd/article_1df77712-488f-11e2-a807-0019bb2963f4.html)

Veterinarian Paul Sundberg of the National Pork Board sees an outbreak of foot-and-mouth disease in the U.S. as inevitable. FMD last broke out in the U.S. in 1929, but because the virus is known to be present in more than 100 nations, it is very likely that it will wreak havoc in the U.S. again. Vaccination against the disease is challenging because the virus has seven distinct serotypes and 60 subtypes, but vaccines are in development. (12/17) <http://www.farmandranchguide.com/feature/livestock_guide/us-livestock-industry-needs-to-be-prepared-for-fmd/article_1df77712-488f-11e2-a807-0019bb2963f4.html>

[**Avian influenza may be carried by the wind**](http://www.worldpoultry.net/Broilers/Health/2012/12/Research-Winds-contribution-to-Avian-Influenza-spread-1128178W/)

A study of a 2003 avian influenza outbreak in the Netherlands found wind may be responsible for 18% of viral spread. Previous studies showed a correlation between wind direction and the pattern of avian influenza's spread through farms. The new findings have implications for culling procedures and containment practices on farms. (12/17) <http://www.worldpoultry.net/Broilers/Health/2012/12/Research-Winds-contribution-to-Avian-Influenza-spread-1128178W/>

[**Crayfish could harbor fungus decimating amphibians**](http://news.nationalgeographic.com/news/2012/121217-chytrid-fungus-amphibian-frog-crayfish-science/)

Chytrid fungus has decimated amphibians, pushing some 300 species close to extinction, and new research suggests the fungus may persist among crayfish in the absence of amphibians. Researchers believe the fungus then attacks any new amphibians that enter waters inhabited by infected crayfish. "This pathogen is bad news. It's worse news than any other pathogen in the history of life on Earth as far as we know it," said San Francisco State University conservation biologist Vance Vredenburg. He added that researchers should continue to explore other possible hosts of the fungus. (12/17) <http://news.nationalgeographic.com/news/2012/121217-chytrid-fungus-amphibian-frog-crayfish-science/>

[**The life-and-death importance of bomb-sniffing dogs**](http://www.businessinsider.com/the-relationship-between-a-bomb-tech-and-his-dog-2012-12)

An Army specialist's most valuable weapon when moving through Afghanistan just may be his dog. This firsthand account of a soldier relying on a bomb-sniffing dog sheds light on the gravity of war and the vital importance of bomb-sniffing canines. (12/17) <http://www.businessinsider.com/the-relationship-between-a-bomb-tech-and-his-dog-2012-12>

[**Children developed myiasis after visiting reindeer herding areas**](http://www.medpagetoday.com/Dermatology/GeneralDermatology/36534?utm_content=&utm_medium=email&utm_campaign=DailyHeadlines&utm_source=WC&xid=NL_DHE_2012-12-20&eun=g470373d0r&userid=470373&email=melissa.turner@smartbrief.com&mu_id=5567467)

Reindeer In light of a recent report of five cases of myiasis in Scandinavian children who visited reindeer habitat, children may want to keep their distance from the animals. Myiasis is a condition in which fly larvae infest human tissue. Researchers reported that the children developed cutaneous swellings and ocular damage as a result of infestation with larvae of the fly Hypoderma tarandi, which may be carried by the reindeer. Since 1980, there have been a total of 17 human cases of myiasis reported. (12/19) <http://www.medpagetoday.com/Dermatology/GeneralDermatology/36534?utm_content=&utm_medium=email&utm_campaign=DailyHeadlines&utm_source=WC&xid=NL_DHE_2012-12-20&eun=g470373d0r&userid=470373&email=melissa.turner@smartbrief.com&mu_id=5567467>

[**Boy with epilepsy opens up about life with therapy dog**](http://www.cnn.com/2012/12/19/health/moss-seizure-dog/)

Obtaining a therapy dog has been life-changing for 9-year-old Evan Moss, who has epilepsy and wrote about his condition and his dog to educate people. Evan's dog Mindy alerts his parents when he has a seizure, allowing them to treat him. Evan and his family raised money to purchase Mindy by selling a book Evan wrote about needing her, and the proceeds allowed them to help other children obtain dogs as well. (12/19) <http://www.cnn.com/2012/12/19/health/moss-seizure-dog/>

[**Researchers Find Strains Of Avian Flu In Chinese Pigs**](file:///C:\Users\Stasi\Documents\Researchers%20Find%20Strains%20Of%20Avian%20Flu%20In%20Chinese%20Pigs)

Researchers from the South China Agricultural University College of Veterinary Medicine found a number of strains of avian influenza in addition to two swine influenza subtypes in Chinese pigs. Because re-assortment of influenza can occur in pigs, the researchers urge improved surveillance of the viruses across the pork industry to advance pandemic preparedness and help prevent transmission to humans and other species. (12/20) <http://www.redorbit.com/news/health/1112752130/avian-flu-in-chinese-pigs-122012/>

[**Thermal imaging aids in detection of rabies in live bats**](http://news.nationalgeographic.com/news/2012/121219-bats-rabies-temperature-animals-science/)

Researchers using thermal imaging have found that the facial temperature of some bats infected with rabies decreases by more than 4 degrees Celsius within 21 days of infection, marking the first time a test has been able to detect evidence of rabies in a live animal. The researchers hope the test, once it is refined, can be used to detect infected bats in wild colonies to help contain the deadly disease and prevent its spread to other species, including humans. (12/19) <http://news.nationalgeographic.com/news/2012/121219-bats-rabies-temperature-animals-science/>

[**Animal health officials remain watchful of brucellosis threat**](http://www.farmandranchguide.com/news/livestock/animal-health-officials-remain-watchful-of-brucellosis-threat/article_f856dcd0-4f8e-11e2-b86c-001a4bcf887a.html)

Brucellosis (brucella abortus) is a highly contagious zoonotic disease that occurs in cattle and free-ranging elk and bison in the Greater Yellowstone Area. There have been no reported brucellosis cases in wildlife species in North Dakota, according to Dr. Susan Keller, state veterinarian. There is a state-federal cooperative brucellosis eradication program established. However, varying testing policies in those GYO states make it challenging, since not all producers are enrolled in a herd plan, making it difficult to trace animals. (1/5) <http://www.farmandranchguide.com/news/livestock/animal-health-officials-remain-watchful-of-brucellosis-threat/article_f856dcd0-4f8e-11e2-b86c-001a4bcf887a.html>

[**Study shows dogs can smell a clostridium difficile infection**](http://www.aahanet.org/blog/NewStat/post/2013/01/02/742083/Study-shows-dogs-can-smell-clostridium-difficile-infection.aspx)

Researchers conducted a study to discover whether dogs are capable of smelling *Clostridium difficile* infections, similar to how dogs can detect certain types of cancer. Their results confirmed that in addition to detecting the infectious agent in stool samples, dogs can even detect infection by smelling the air surrounding sick patients. Researchers noted that while current testing methods can take at least one or two days, dogs can screen patients in a hospital ward for infection in under 10 minutes. (1/2) <http://www.aahanet.org/blog/NewStat/post/2013/01/02/742083/Study-shows-dogs-can-smell-clostridium-difficile-infection.aspx>

[**Scientists using weather patterns to predict outbreaks**](http://www.foxnews.com/health/2013/01/03/more-scientists-using-weather-patterns-to-forecast-disease-outbreaks/)

As technology and mathematical models become more sophisticated, scientists are increasingly able to predict disease outbreaks using weather data, a breakthrough that could be harnessed for vaccination and other prevention efforts. A number of researchers have developed disease prediction models over the past five years, and some have shown promise with zoonotic diseases. (1/2) <http://www.foxnews.com/health/2013/01/03/more-scientists-using-weather-patterns-to-forecast-disease-outbreaks/>

[**Animal abusers likely to harm humans, too**](http://www.tennessean.com/article/20130105/OPINION03/301050017/Animal-cruelty-key-later-violent-behavior?nclick_check=1)

Mental health professionals and the American Psychological Association have designated animal abuse or torture as an important indicator of future violent behavior toward humans. Typically, animal abusers suffer from low self-esteem, lack of emotional maturity, feelings of resentment toward others or society, displaced aggression, loneliness, and may be unable to establish constructive social relationships. Abusers often suffered from childhood neglect and/or physical abuse. Animal abusers almost always suffer from mental illness and require professional treatment. (1/5) [http://online.wsj.com/article/SB10001424127887323874204578220002834225378.html?mod=dist\_smartbrief#](http://online.wsj.com/article/SB10001424127887323874204578220002834225378.html?mod=dist_smartbrief)

Also visit the National Link Coalition website… [www.nationallinkcoalition.org](http://www.nationallinkcoalition.org)

[**Rodent study explores patterns of leptospirosis spread in Asia**](http://www.sciencedaily.com/releases/2013/01/130107111357.htm)

In the framework of the CERoPath program, IRD researchers and their partners have demonstrated the links between rodents' environment, the climate, and leptospirosis infection. Taking a sample of nearly 3,000 rats and mice from about twenty different species in Lao P.D.R., Cambodia and Thailand, researchers found that rice fields, secondary forests and their neighbouring fields had the highest prevalence of *Leptospira* among rodents, implying that such areas could present the highest risk of infection for people staying there. The data also demonstrated that bacteria are spreading more efficiently during the rainy season. (1/7) <http://www.sciencedaily.com/releases/2013/01/130107111357.htm>

[**Family undergoes rabies prophylaxis after bobcat attack**](http://hosted.ap.org/dynamic/stories/U/US_BOBCAT_ATTACK?SITE=AP&SECTION=HOME&TEMPLATE=DEFAULT)

A confirmed rabid bobcat attacked a Roger Mundell Jr. and his nephew before being shot and killed by Mundell. After pouncing on Mundell, sinking its teeth into his face and its claws in his back and holding him in what he described as a bear hug, the bobcat went outside and bit his 15-year-old nephew. He, his nephew and his wife -who was not bitten but got the animal's blood on her – began the rabies prophylaxis immediately after the attack. (1/9) <http://hosted.ap.org/dynamic/stories/U/US_BOBCAT_ATTACK?SITE=AP&SECTION=HOME&TEMPLATE=DEFAULT>

[**Lack of food animal veterinarians compromises food-safety**](http://kbia.org/post/wanted-large-animal-veterinarians-willing-work-rural-areas)

Some debate whether there is a shortage of food-animal veterinarians or simply a distribution issue, but in either case, the result is the same: There are large areas in the U.S. with substantial livestock populations and insufficient numbers of veterinarians available to provide regular care, according to the AVMA. The situation compromises the safety of the U.S. food supply, the AVMA notes. Financial incentives for new veterinary graduates may help entice some into food-animal medicine, while bringing technicians to work in the field with veterinarians could also help cover underserved areas. (1/7) <http://kbia.org/post/wanted-large-animal-veterinarians-willing-work-rural-areas>

[**Mexico culls 300,000 birds in effort to isolate avian influenza**](http://www.trust.org/alertnet/news/mexico-reports-bird-flu-outbreaks-at-two-egg-farms)

The H7N3 avian influenza virus surfaced at two egg farms in Mexico, according to the World Organisation for Animal Health, or OIE, resulting in the culling of some 300,000 birds in an attempt to isolate the outbreak. A total of 740 poultry had died from the virus which emerged in the two egg farms located in the central state of Aguascalientes, said a report by the Mexican agriculture ministry to Paris-based OIE. "Timely notification from the farmer and surveillance activities allowed immediate depopulation of the two affected production units, reason why both outbreaks identified are closed," Mexican authorities said in a report. (1/9) <http://www.trust.org/alertnet/news/mexico-reports-bird-flu-outbreaks-at-two-egg-farms>

[**Releasing pet fish threatens native marine ecosystems**](http://science.nbcnews.com/_news/2013/01/10/16451117-flushing-nemo-pet-fish-pose-ocean-threat)

Pet fish and the plants they are housed with pose a serious threat to native species when they are introduced into marine waters, according to a new report that finds representatives of 102 aquarium species enter the U.S. through two California ports each year. Thirteen of those species have been introduced to California's ocean waters, and more than two-thirds are established there. Aquarium species are particularly prone to becoming invasive in a new ecosystem, experts say. "We believe that that is in part due to the fact that they have to be so hardy to be able to survive the trade," said University of California, Davis, professor Susan Williams. (1/9) <http://science.nbcnews.com/_news/2013/01/10/16451117-flushing-nemo-pet-fish-pose-ocean-threat>

[**Preventative medicine is best for pets and owners**](http://www.chicagonow.com/steve-dales-pet-world/2013/01/resolutions-for-pets-2013-from-plump-puppies-to-bsl/)

Dog and cat owners are trending toward fewer veterinary visits for their pets, according to the AVMA's latest U.S. Pet Ownership and Demographics Sourcebook. Because preventive care helps keeps pets healthy and prevents untimely deaths, author Steve Dale argues improving utilization of preventive care should be among animal lovers' goals for 2013. Among Dale's other goals for the year are supporting what he calls "sensible dangerous dog laws," rather than those that focus on a single breed, and fighting pet obesity. (1/9) <http://www.chicagonow.com/steve-dales-pet-world/2013/01/resolutions-for-pets-2013-from-plump-puppies-to-bsl/>

[**Minnesota reports first rabies case of 2013**](http://www.austindailyherald.com/2013/01/11/mower-county-horse-tests-positive-for-rabies/)

A horse in Mower County was the first animal in 2013 to test positive for rabies in Minnesota, according to the Minnesota Department of Health. “This is not particularly out of the ordinary,” said Heather Fowler, CDC/CSTE applied epidemiology fellow with MDH. “Each year in Minnesota, we see about one to two [rabies] positive horses.” Joni Scheftel, state public health veterinarian, said about 60 to 70 animals test positive for rabies in Minnesota each year, usually being infected by bats or skunks. (1/11) <http://www.austindailyherald.com/2013/01/11/mower-county-horse-tests-positive-for-rabies/>

[**Scientists working to develop technology to rival dogs’ noses**](http://www.extremetech.com/extreme/145584-can-mass-spectrometers-rival-the-canine-nose)

German scientists are working to develop high-tech devices that might out-sniff dog noses. The goal is to detect minute traces of exhaled gases to locate live humans trapped in rubble, which dogs have trouble doing. Despite the promise of technology, the combination of a dog's sniffing prowess, instincts and ability to process and make decisions based on wind speed and direction mean search-and-rescue animals aren't likely to be replaced soon. (1/15) <http://www.extremetech.com/extreme/145584-can-mass-spectrometers-rival-the-canine-nose>

[**Pet dogs- a transmission route for human noroviruses?**](http://www.journalofclinicalvirology.com/article/S1386-6532(11)00521-X/abstract)

Human noroviruses (HuNoVs) are one of the leading causes of diarrheal diseases worldwide in people. Virus transmission can occur via the fecal-oral route from person to person or via contaminated food, water, or surfaces, but is not known if pet dogs can play a role in transmission. In this study, HuNoVs were detected in 4 fecal samples from dogs that had been in direct contact with symptomatic persons. The results suggest that dogs can serve as carriers for HuNoVs and thereby play a role in transmission of NoVs that infect humans. (1/12) <http://www.journalofclinicalvirology.com/article/S1386-6532(11)00521-X/abstract> J Clin Virol. 2012 Mar;53(3):244-7