

One Health News Bits November 2014

Vultures could hold key to deadly bacteria.

As millions of Americans tuck into the traditional turkey dinner this Thanksgiving, they might spare a thought for the turkey vulture, whose meal will certainly be undercooked, lacking in trimmings, eaten at the side of the road and seething with toxic bacteria that would kill most other animals. *BBC* (11/26) *Environmental Health News, AboveThe Fold*

<http://www.bbc.com/news/magazine-30216294>

Veterinarians at the front lines of One Health

In 1999, veterinarian Tracey McNamara identified the first West Nile outbreak in North America when she identified the connection between human illnesses and avian mortality inside and outside the Bronx Zoo. The case shined a new spotlight on the public health role of veterinarians. Today, the University of California, Davis' Predict Initiative dispatches veterinarians around the world to monitor wild animal populations for disease, and among their successes is stopping a deadly zoonotic yellow fever before it reached humans. It's one of many ways in which veterinarians are working at the front lines of disease prevention. *National Journal* (11/24)

Animal Health SmartBrief

<http://www.nationaljournal.com/health-care/veterinarians-just-might-save-the-world-20141124>

How physicians address animal bites

One percent of emergency department admissions are due to animal bites, according to physician Margaret Fisher. Dog bite cases are far more common than those involving cat bites. Children are most often the victims in such cases, and they're usually bitten by an animal in the home, according to Fisher, who outlines the approach physicians should take to treating bites, including a discussion of rabies and possible bacterial infections. Educating people about how to prevent bites is key, she said. *Healio (free registration)/Infectious Diseases in Children* (11/24) *Animal Health SmartBrief*

<http://www.healio.com/pediatrics/vaccine-preventable-diseases/news/online/%7Baea5f2b5-48ed-40af-a6c9-d27cb9f0046e%7D/education-is-key-to-help-protect-patients-from-animal-bites>

Search for MERS origins confounds experts

Scientists continue to search for the origins of the Middle East respiratory syndrome coronavirus, which has killed 346 people in Saudi Arabia since the outbreak began. Studies have shown a high percentage of cases were acquired in hospitals and not from primary contact with animals, suggesting human-to-human transmission is a key factor in spreading the disease. Other studies confirmed traces of the virus in camel nasal secretions, but not urine and milk, and research has found that workers in camel rendering plants had evidence of antibodies to the virus with no history of symptoms. *Reuters* (11/22) *Animal Health SmartBrief*

<http://www.reuters.com/article/2014/11/22/us-health-mers-saudi-idUSKCN0J60F720141122>

Ohio House passes anti-algae bill limiting manure, fertilizer on farms.

The Ohio House overwhelmingly approved new restrictions on the application of manure and other fertilizers on farmland as one step to reduce harmful algae blooms on Lake Erie. *Toledo Blade*, Ohio (11/20) *Environmental Health News, AboveThe Fold*

<http://www.toledoblade.com/Politics/2014/11/20/Ohio-House-passes-anti-algae-bill-limiting-manure-fertilizer-on-farms.html>

More than Ebola, other tropical diseases pose growing threat to US.

Ebola isn't the tropical disease that's most likely to cause health problems in the United States – not by a long shot. A handful of other tropical diseases pose much more realistic threats. And they're spread by insects, which can't be quarantined. *National Geographic News* (11/19) *Environmental Health News, AboveThe Fold*

<http://news.nationalgeographic.com/news/2014/11/141119-ebola-dengue-chagas-chikungunya-tropical-diseases-health/>

In ferret DNA, researchers find key influenza and cystic fibrosis insights

Researchers who sequenced the ferret genome are studying how the animals respond to influenza and cystic fibrosis, discovering information that may help people. The researchers found that two different forms of influenza -- the 1918 virus responsible for 25 million deaths and the still-active virus that sparked a pandemic beginning in 2009 -- elicited different transcriptional responses in the trachea but had similar effects in the lungs. The cystic fibrosis study found disease processes appear to begin and rapidly accelerate early in life. *Business Weekly* (U.K.) (11/19) *Animal Health SmartBrief*

<http://www.businessweekly.co.uk/academia-a-research/17805-ferret-genome-clue-to-flu-and-cystic-fibrosis>

Pollution eyed in sudden decline of sea turtle.

The sudden decline of Texas' official sea turtle was unexpected and could be an indication that pollution could be making the Gulf of Mexico a difficult place for species like the Kemp's ridley to survive, experts said Wednesday. *Houston Chronicle*, Texas (11/19) *Environmental Health News, AboveThe Fold*

<http://www.chron.com/news/science-environment/article/Signs-grow-of-oil-spill-effect-on-turtles-5903833.php>

Explosives-sniffing dogs headed to Ohio colleges

Bomb-sniffing dogs patrol a number of Ohio universities, and more campuses are scheduled to add dogs. The idea is to enhance security, conduct checks of campuses as needed and increase local access to the dogs outside the schools, too. The dogs also make law enforcement personnel more approachable, officials say. *Insurance Journal/The Associated Press* (11/18) *Animal Health SmartBrief*

<http://www.insurancejournal.com/news/midwest/2014/11/18/347378.htm>

Dogs detect prostate cancer in study; breast cancer trial has begun

A recent U.K. study found dogs can detect prostate cancer with 93% accuracy by sniffing urine, and a clinical trial is underway there to determine whether dogs can detect breast cancer by sniffing patients' breath. Dogs have also been used to detect E. coli in urine, and studies are testing whether dogs can identify the early stages of pancreatic and stomach cancers, which are notoriously difficult to detect. *ChicagoNow.com/Steve Dale's Pet World blog* (11/17) *Animal Health SmartBrief*

<http://www.chicagonow.com/steve-dales-pet-world/2014/11/cancer-detecting-dogs-research-again-supports-canine-ability-to-detect-cancers/>

Government halt on infectious disease research leaves scientists confused

Scientists working with certain pathogens including SARS, MERS and influenza must determine whether their work falls under the government's recent notification to halt gain-of-function research. "Flu and coronavirus research is extremely important as an overall NIH activity, and it will be crucial to separate the activities that meet the definition of the pause from those that don't," said Harvard University epidemiologist Marc Lipsitch. *ScienceMag.org* (11/17) *Animal Health SmartBrief*

<http://news.sciencemag.org/biology/2014/11/moratorium-risky-virology-studies-leaves-work-14-institutions-limbo>

Epidemiologists look for zoonotic diseases that pose pandemic risk

As the Ebola outbreak continues in West Africa, the world's epidemiologists are working to identify new viral pandemic threats. The U.S. PREDICT project is finding and examining zoonotic diseases in the wild and gauging their threat to humans. The goal is to predict which virus might "become the next Ebola or the next SARS," says project co-director Stephen Morse. Many of the world's deadliest outbreaks can be traced to animals. *FoxNews.com* (11/17) *Animal Health SmartBrief*

<http://www.foxnews.com/health/2014/11/17/thinking-beyond-ebola-will-these-viruses-be-next-public-health-crises/>

Electronic tracing system on schedule, Wash. state agriculture officials say

An updated electronic animal disease traceability system should be available by the summer, according to the Washington state Department of Agriculture. The goal is to respond to food safety issues within a day to help contain disease and minimize the effect on ranchers. The new rules include eliminating a 15-animals-or-fewer dairy exemption and instituting a 23-cents-per-head fee on cattle at sale, slaughter or transportation out of state. *Capital Press Agriculture* (Salem, Ore.) (11/17) *Animal Health SmartBrief*

<http://www.capitalpress.com/Washington/20141116/wash-animal-diseasetraceability-system-on-track>

Case report puts cat scratch disease in the spotlight

A woman who developed symptoms of illness may have been infected with *Bartonella henselae* acquired from a cat, according to a case report. The bacterium can cause cat scratch disease in humans, but it is relatively rare, according to veterinarian Greg Nelson. In rare instances, dogs have been known to carry the pathogen, Dr. Nelson added. *LiveScience.com* (11/11) *Animal Health SmartBrief*

<http://www.livescience.com/48717-bacterial-infection-cat-scratch.html>

Rescue facility cares for horses and people

The Pegasus Project was started five years ago by Allyson and Mike DeCanio after they rescued 12 abandoned and starving horses. Since then, they've matched over 100 rescued and rehabilitated horses with new homes. The people who adopt the horses benefit, too, including a bullied teenager who has become "a healthy, happy, normal, functioning 16-year-old" since adopting a horse, according to her mother. *NBC News* (11/11) *Animal Health SmartBrief*
<http://www.today.com/pets/pegasus-project-rescues-horses-while-helping-humans-1D80281005>

Emerging zoonoses: Humans share the blame

While bats are known or suspected to be reservoirs for deadly zoonotic diseases including rabies, SARS, Hendra virus, Nipah virus and Ebola, they shouldn't be blamed for the emergence of such diseases, experts say. Human encroachment into bat habitat is an important factor. Hunting and consuming bats and other wild animals contributes to zoonotic disease transmission, while clearing land for homes and crops disrupts ecosystems and brings people into closer contact with animal reservoirs of disease. *The Daily Beast* (11/11) *Animal Health SmartBrief*
<http://www.thedailybeast.com/articles/2014/11/11/bats-link-to-ebola-finally-solved.html>

Genome study shows human influence on domestic felines

In the most comprehensive evaluation of the domestic feline genome to date, researchers noted some domestic feline traits were likely selected for during domestication, including how cats respond to treats. The results are published in the Proceedings of the National Academy of Sciences. *Popular Science* (11/10) *Animal Health SmartBrief*
<http://www.popsci.com/article/science/kitty-dna-shows-cats-have-evolved-learn-treats>

Lessons from the Ebola outbreak

The world must take notice of the lessons learned from the Ebola outbreak in West Africa, writes Harvard University professor Lawrence Summers, who also has served as an adviser to President Barack Obama. Three main lessons emerge from the current outbreak, Summers writes, and if the world pays attention, it may be able to prevent or at least mitigate future outbreaks. *The Washington Post* (tiered subscription model) (11/9) *Animal Health SmartBrief*
http://www.washingtonpost.com/opinions/lawrence-summers-the-world-cant-hide-from-pandemics/2014/11/09/bb352f92-66ab-11e4-9fdc-d43b053ecb4d_story.html

Expert says claims that war games will harm thousands of animals are 'overblown'.

No humans will be harmed in the war games the Navy is conducting in the Pacific Ocean near California and Hawaii for the next four years. The same cannot be said for marine mammals that gather there. *Washington Post* (11/9) *Environmental Health News, AboveThe Fold*
http://www.washingtonpost.com/national/health-science/expert-says-claims-that-war-games-will-harm-thousands-of-animals-are-overblown/2014/11/09/1c6338ea-644f-11e4-9fdc-d43b053ecb4d_story.html

Pets are just what the doctor ordered

A survey of 1,000 general practitioners and family doctors indicates physicians know that pets improve human health. The doctors reported firsthand experience, journal articles, media stories and patient accounts as sources for their confidence in the health benefits of pets. More than 80% of respondents even said they'd prescribe pets for patients if there was sufficient medical

evidence. *Chicago Tribune* (tiered subscription model) (11/6) *Animal Health SmartBrief*
<http://www.chicagotribune.com/lifestyles/pets/ct-pets-1106-briefs-20141106-story.html#page=1>