Speak up on Chronic Lyme in WG/Lyme in Insurance Plan/New Repellent Ingredient/Tick Virus Outbreak in China/LDA-Approved Nat’l. Charity/Increased $$-Lyme Amendment/TBD in Fleas/NIH Awards Vaccine $$/Lyme-Dementia

Lyme Patients: Speak Up Now on Persistent/Chronic Lyme! Sept 4 Deadline

**Background:** The upcoming meeting of the HHS Working Group on Sept. 15 may be your last chance to influence language on persistent/chronic Lyme. At the last meeting, several members of the Working Group (WG) worked hard to have language related to patients with persistent Lyme symptoms removed from the WG report which will go to Congress at end of year. Read more
about the last TBDWG meeting.

At the upcoming September meeting, the WG will vote on proposed changes in language that can affect patient access to care. Please submit verbal or written comments now, deadline to request verbal comment or to submit written comment **11:59 p.m., ET, Friday, September 4, 2020**.

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**Meeting Details:** The fifteenth meeting of the **Tick-Borne Disease Working Group** (TBDWG) will be held on two non-consecutive days, September 15 and 22. This is an online meeting and everyone is welcome to attend. The TBDWG will review the draft 2020 report to the HHS Secretary and Congress, as well as review and approve graphics and images for the report.

[Register to Attend the Online Meeting.](#)

[View the Federal Register Meeting Notice.](#)

[View the Meeting Agenda.](#)

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**How to Submit Your Request for Verbal Public Comment at September 15 meeting (heard online at meeting):** Verbal remarks will be provided by the public over the phone during the live webcast and will become part of the archived recording and meeting summary that is posted afterward on the HHS website.

- **Deadline:** All sign-up requests must be received by **11:59 p.m., ET, Friday, September 4**
- **Submit an email request** to tickbornedisease@hhs.gov
- **Use the email subject line:** Verbal Public Comment – September 15

**Next steps:** If more requests to provide verbal public comment are received than can be accommodated during the meeting,
speakers will be randomly selected. You will receive notification on the status of your request on **Wednesday, September 9**.

- **If you are selected to provide verbal public comment at the meeting**, you will be asked to confirm that you are still available to speak during the assigned time. Upon confirmation, you will receive a call-in number and time to provide your comment. Each person will be limited to 3 minutes in order to accommodate as many speakers as possible. If you are no longer able to provide verbal public comment, HHS will randomly select another speaker.

- **If you are not selected**, you are welcome to submit your name for consideration in a future meeting of the Working Group once the meeting information is posted.

- **Please note:** All public comment requests that were made for the postponed August meeting will be reviewed for possible speaking opportunity at the September 15 meeting. Those who did not request to speak at the August meeting may also apply to speak for the September 15 meeting.

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**How to Submit Your Written Public Comment:** Written public comments are shared with Working Group members and are also posted on the HHS webpage. Written public comments will be made accessible to the public in advance of the meeting.

- **Submit an email** to **tickbornedisease@hhs.gov**
- **Use the email subject line:** Written Public Comment –
September 15

- **Provide your preferred identification:** Explain how you prefer to be identified with your comment. Without this information, your comment will not be posted. You may choose one or more of the following options:
  - Use your name
  - Be listed as anonymous
  - Include your city and/or state
  - Provide comments on behalf of an organization (please include the organization’s full name)
- **Deadline:** All written comments must be received by **11:59 p.m., ET, Friday, September 4**

**Writing your public comment:**

- **Format:** Comments must be in the body of your email or in an attached Word document.
- **Page Limit:** Comments must not exceed four (4) pages in Calibri or Times New Roman, 11 point font (text that exceeds four pages will be deleted).
- **Graphics:** Do not include graphics, images, text boxes, or tables. If included, they will not be retained.
- **Links:** Hyperlinks will only be added for “.gov” sites (local, state, or federal). For all other reference sites, please insert the full URL (e.g., http://learn.genetics.utah.edu/content/epigenetics).
- **Attachments:** Do not include any attachments. It is not possible to include attachments as supporting documentation to written comments.

**Next steps:** Your written comment will be posted to the HHS website before the meeting. If you have any questions or concerns about submitting your comment, contact tickbornediseases@hhs.gov.
NIH awards $3.5 Million for Novel Lyme Disease Vaccine Study

With a new $3.5 million grant from the National Institutes of Health (NIH), Utpal Pal, PhD, professor in Veterinary Medicine at the University of Maryland (UMD) will be partnering with Matthias Schnell, director of the Jefferson Vaccine Center at Thomas Jefferson University to develop a novel “next-generation” Lyme disease vaccine.

Pal, a tick immunobiologist, and Schnell, whose lab studies rabies virus as a platform for vaccination, will adapt the rabies virus platform to fight Lyme disease. The inactivated rabies virus, which helps the body produce antibodies to fight rabies, will be repurposed to produce other types of proteins that can fight Borrelia burgdorferi, the Lyme disease bacteria, a technique found effective for other viral vaccinations.

This study will test the four already identified vaccine candidate proteins, as well as the three major types of rabies vaccine platforms– using live attenuated virus, inactivated virus, and the shell of a virus with viral proteins on the outside but no virus inside to trick the body. Pal is also studying both Borrelia proteins and the tick proteins that keep the Borrelia alive so it can be transmitted to humans.

Read more about this project here – (prweb.com)

Utpal Pal, PhD lectured at LDA’s 2018 Annual Scientific Conference – Immune Evasion of Lyme Disease Agents
Lyme Disease Included in Insurer Critical Illness Plan

American insurer Colonial Life is offering a new critical illness plan with optional rider that offers a lump sum benefit for hospitalization for treatment of COVID-19 and over 12 other infectious diseases, such as Lyme disease, antibiotic-resistant bacteria, Legionnaires’ disease, meningitis, and sepsis.

For the critical illness plan’s Lyme disease coverage: the date of Lyme disease diagnosis must be verified and confirmed to not be a pre-existing condition. Payment of the lump sum benefit varies by state and the type of coverage, ranging from $5,000 – $100,000; one lump sum per lifetime. A rider for hospitalization for various conditions, including Lyme disease can be added with a maximum payout of $150,000 per lifetime. Both individual and group plans are available.

Coverage is available for up to 56 different serious conditions and treatment procedures. Additional conditions are covered for children. Riders can be added to coverage which...
provide additional benefits for infectious diseases, cancer, first diagnosis, heart procedures and Alzheimer’s disease.

According to Pam Jenkins, assistant vice president for product development at Colonial Life: “Even employees with good health insurance can face significant expenses from copays, deductibles and nonmedical costs related to a serious illness. Group critical illness insurance helps relieve financial worries by providing a lump-sum benefit payable directly to you to use as needed.”

Read more about Colonial Life’s new critical illness plan – prnewswire.com

Disclaimer: The Lyme Disease Association Inc. (LDA) provides this information as a public service. LDA does not make product or services endorsements nor give permission to companies or individuals to use the LDA’s name to endorse their products or services.

Study Reveals Some Tick-Borne Pathogens Found in Fleas

Photo by CDC, *Peromyscus leucopus*
In a recent study conducted in central Pennsylvania, evidence of emerging pathogens, some also common to ticks, have been found in fleas. Various pathogens can be spread by ectoparasites among animal host populations in nature. Along with ticks, fleas are found to commonly infest small mammals. The role of pathogen transmission cycles for these vectors is unknown.

In this study, small mammals were captured and fleas were collected in an effort to better understand the enzootic cycle of flea-borne pathogens in central Pennsylvania. Pathogen testing was conducted in both the small mammal hosts and the fleas collected.

Seven species of small mammals were captured of which white-footed mice (*Peromyscus leucopus*) and southern red-backed voles (*Myodes gapperi*) accounted for over 94% of the captures. Only *P. leucopus* tested positive for the blood-borne pathogens examined, with 47 (18.1%) positive for *Anaplasma phagocytophilum* and ten (4.8%) positive for *Babesia microti*.

Of the 61 fleas collected from small mammals and tested for pathogens, *Oreopeas leucopus* was the most common flea species. Pathogenic bacteria and parasites were detected in 33.3% of total fleas collected, and included *Bartonella vinsonii* subspecies *arupensis*, *B. microti*, and a *Rickettsia felis*-like bacterium. Researchers believe this to be the first report of *B. microti* DNA detected from a flea, as well as the first report of a *R. felis*-like bacterium from rodent fleas in eastern North America.

At this time, only plague (*Yersinia pestis*) is a nationally reportable flea-borne disease in the United States. Like tick-borne diseases, under-reporting of flea-borne illnesses limits understanding of the burden of disease from these vectors. The potential for new and re-emerging pathogens in fleas as well as the potential for fleas to play a role in natural transmission cycles of tick-borne pathogens is not understood.
This study elucidates that further investigation is needed to understand the ecology of flea-borne disease transmission cycles, vector competence of fleas for tick-borne pathogens, and the risk to human health.

Read full article: Host distribution and pathogen infection of fleas (Siphonaptera) recovered from small mammals in Pennsylvania

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CFC 2020 Approves LDA as National Charity

The LDA has been designated as a national charity included in the 2020 Combined Federal Campaign (CFC) Charity List. CFC is part of the Office of Personnel Management (OPM). Each year, federal employees are provided with lists of approved charities for their workplace giving through the CFC. The LDA has met the requirements and been a part of CFC for 15 years running. LDA’s administrative and fundraising costs were determined to be only 2.7% for 2019, meaning 97.3% went directly to programs.

The LDA’s CFC 2020 identification for donors is #11424, and the Lyme Disease Association, Inc. will appear in the listing of National/International Independent Organizations, which is published in each local campaign charity list. See your

Thanks to all those volunteers who have helped with our programs nationwide, and a special thanks to those who have been contributing through their federal workplace CFC to the Lyme Disease Association, Inc.

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**New Tick Repellent Ingredient Registered by EPA**

On July 20, 2020, the Environmental Protection Agency (EPA) registered a new active ingredient called nootkatone, which repels and kill ticks, mosquitoes, and other pests including bed bugs, and fleas. The Center for Disease Control (CDC) discovered and developed the new ingredient, a non-toxic chemical found in Alaska yellow cedar trees and grapefruit skin in minute amounts. Nootkatone smells and tastes like grapefruit, and is used in the fragrance industry for perfumes and food industry for flavoring. It can be used on humans and pets.

Nootkatone apparently kills bugs differently than previous
classes of insecticides, including pyrethroids, organophosphates, carbamates, and cyclodienes. Since it is a new chemical – the first insecticide approved in 11 years – it can kill bugs that are resistant to currently available pesticides. It lasts on skin and clothing for several hours.

CDC’s exclusively licensed partner, Evolva, and HHS Biomedical Advanced Research Development Authority were crucial to nootkatone development. Evolva can produce large amounts of nootkatone for low-cost, as it takes several tons of grapefruit to produce 2.2 lbs of nootkatone.

Dr. Brian Fallon, director of the Lyme and Tick-Borne Diseases Research Center at Columbia University in New York City, said of nootkatone, “I think it’s a major contribution to our arsenal of repellents.” (nbcnews.com)

Tick-borne diseases represent almost 80 percent of reported vector-borne disease cases in the U.S. Reported cases of vector-borne diseases doubled from 2004 to 2018. Companies interested to develop brand name products will be required to submit a registration package to EPA for review, and products could be available in stores as early as 2022.

Current ingredients registered by the EPA as skin-applied insect repellents include Catnip oil, Oil of citronella, DEET, IR 3535, p-Methane-3,8-diol (pmd), Oil of lemon eucalyptus, Picardin, 2-undecanone, and now nootkatone.

LDA’s Tick-Insect Repellents: Check the Facts
LDA’s TBD & Prevention Page

CDC Press release
CDC Digital Press Kit
NY Times: Citrus Flavoring Is Weaponized Against Insect-Borne Diseases
Nbcnews.com: First new insect repellent approved in 11 years smells like grapefruit
Severe Fever with Thrombocytopenia Syndrome (SFTS) cases first appeared in April 2020 in China and since then, 37 more cases have occurred in Jiangsu and 23 in Anhui Provinces in China. SFTS is a haemorrhagic fever transmitted by the Haemaphysalis longicornis tick (Asian longhorned tick). The disease spreads rapidly and has a high fatality rate so is of high concern to the World Health Organization (WHO). SFTS is a Phlebovirus.

Experts are now indicating possible transmission from humans via blood, the respiratory tract, and wounds and from infected
animals to humans.

According to CDC, Emerging Infectious Diseases, outbreaks have been reported in China in 2009 and in S. Korea in 2012. See https://wwwnc.cdc.gov/eid/article/24/11/17-0756_article

Another Phlebovirus, Heartland virus, is found in the US. It is apparently transmitted by the lone star tick and is most similar to the SFTS virus. The Asian longhorned tick, which is transmitting SFTS virus in Asia, is found in the US in 12 states.

Novel bunyavirus re-emerges in China – News.com.au

Tick-borne bunyavirus causing fever, hemorrhages spreading in China: Everything we know so far – Firstpost.com

Asian Longhorned Tick Continues to Multiply, Can transmit to Animals in the Lab – LDA website

Heartland virus disease – CDC website

House Approves Chris Smith Amendment Increasing Lyme Research by $4M

News from Congressman Chris Smith website:
The House of Representatives passed an amendment authored by Rep. Chris Smith (R-NJ) which increases Lyme disease research funding by $4 million, for a total of $20 million, at the Centers for Disease Control and Prevention (CDC) for fiscal year 2021. The amendment, which passed July 30th, has been co-sponsored by lead Democrat, Rep. Collin Peterson (MN), and Reps. Elise Stefanik (R-NY), Antonio Delgado (D-NY), Max Rose (D-NY), and Raul Grijalva (D-AZ).

Rep. Smith said, “Just three years ago CDC’s Lyme budget was only $11.7 million. The increase in funding achieved through my amendment will help CDC develop better diagnostic tests for Lyme, expand tick surveillance activities across the US and strengthen the federal government’s overall strategy to combat Lyme.”

In the news release, Pat Smith, LDA President was quoted: “Rep. Smith’s funding amendment is an important step in the fight to reign in Lyme disease. The rising case numbers and increasing spread of tick-borne diseases are alarming and require a sustained focus from Congress to try to control this epidemic. We are grateful to Congressman Smith for his continued dedication to this effort and his success along with his colleagues to acquire an additional $4M in funding for Lyme disease and other tick-borne diseases. In these difficult times for our country, that is an outstanding accomplishment.”

Earlier in July, the House agreed to another Smith Lyme
Disease amendment to mandate a GAO investigation into possible use of ticks in a Department of Defense bioweapons program. Read more on LDA website

Rep. Smith introduced the House version of the recently enacted law, the **TICK Act** (Ticks: Identify, Control, Knockout Act—HR 3073), which implements a national strategy to fight Lyme disease and authorizes an additional $150 million to increase funding for Lyme research, prevention and treatment programs. Senator Susan Collins (ME) had introduced the Senate version. Read more on LDA website

Read Rep. Chris Smith’s full news release here

Read history of the amendment on LDA website

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**Co-Chair: “Persistent Lyme Religious Belief”/Lyme $$$ Amendments/ Tick Biowarfare Investigation Passes House/WNBA Denies Lyme-Covid**
Exemption/LDA’s New Spanish LymeR Primer/Lyme Vaccine Phase 2 Results/Asian Longhorned Tick Increases