

Lyme Disease Communication: New Means of Reaching Health Care Providers and Patients



Anna Perea, M.S., Health Communications Fellow
Division of Vector-Borne Diseases | Bacterial Diseases Branch

Health Care Providers (HCPs) face different challenges when treating and talking to patients about Lyme disease

❑ Endemic regions

- Talking about prevention
- Treating tick bite prophylaxis
- To test or not to test?

❑ Non-endemic regions

- Explaining why Lyme is not in their region
- Not providing tick bite prophylaxis or Lyme disease testing without a travel history
- Talking about tickborne diseases that DO occur in their area

❑ All regions

- Communicating about “chronic” Lyme disease, post-treatment Lyme disease syndrome, anxiety about the disease

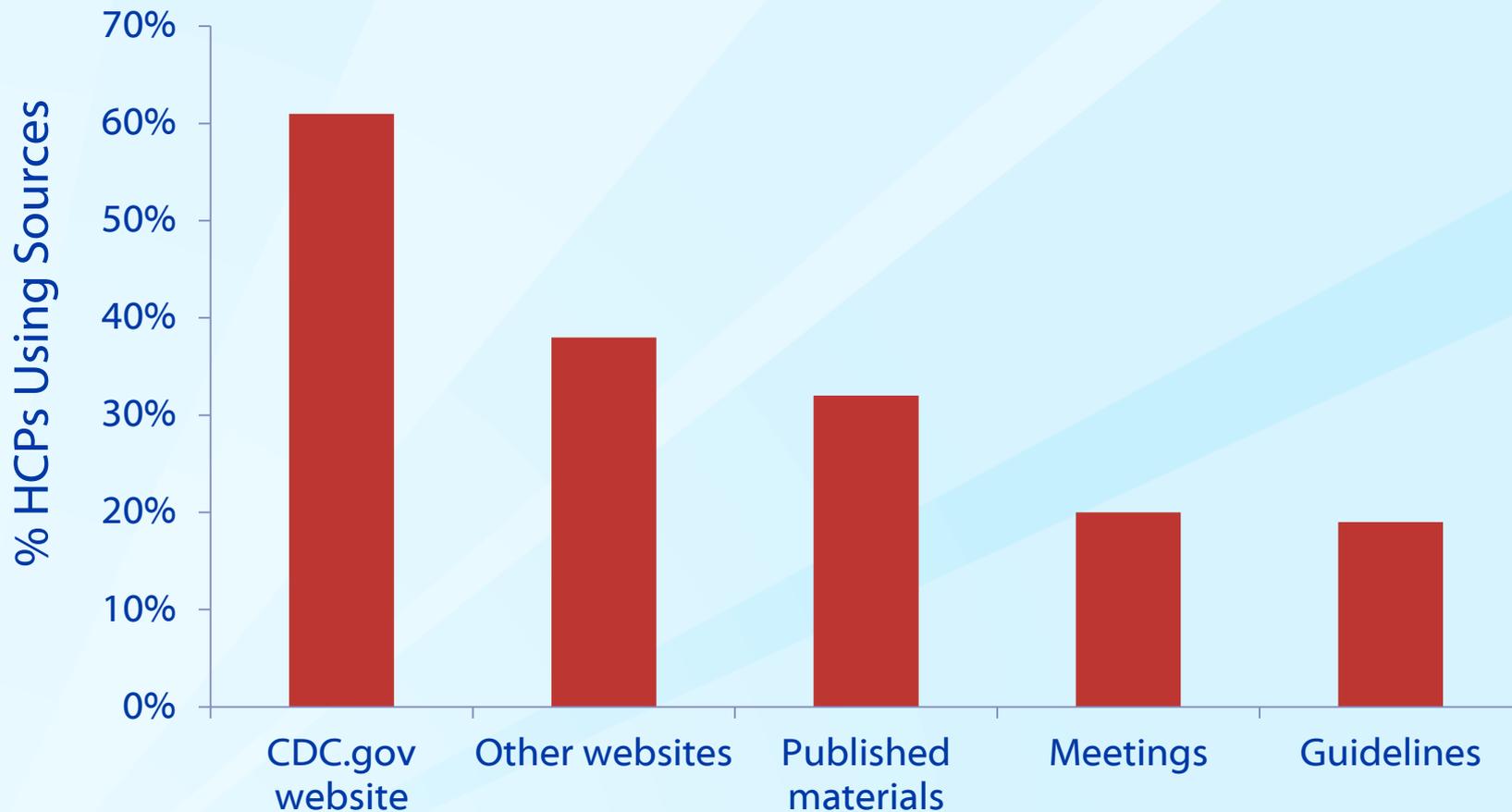
Determining HCPs' Needs

- ❑ **What do they already know?**
 - DocStyles
 - Qualitative interviews
- ❑ **What do they want to know?**
 - Qualitative interviews
 - Internet hits
 - Provider inquiries
- ❑ **How do they want to get information?**
 - Online
 - Webinars
 - Meetings

DocStyles Survey

- ❑ **National health care provider survey**
 - Approximately 2,000 HCPs participate throughout U.S.
 - Provides regional estimates, not state specific
 - Licensed through Porter-Novelli
- ❑ **Used by many CDC programs**
- ❑ **Lyme-related questions submitted in 2009, 2011, and 2012**
- ❑ **Publications in press/in progress**

DocStyles 2009—Information sources used by HCPs



Specific Sources for Tickborne Disease Management

Information and Interviews—On the Road

- ❑ **Exhibit at high-impact medical conferences to distribute materials and interview practitioners**
 - American College of Nurse Practitioners—October 2011
 - Infectious Diseases Society of America—November 2011
 - American Academy of Physician Assistants—May 2012



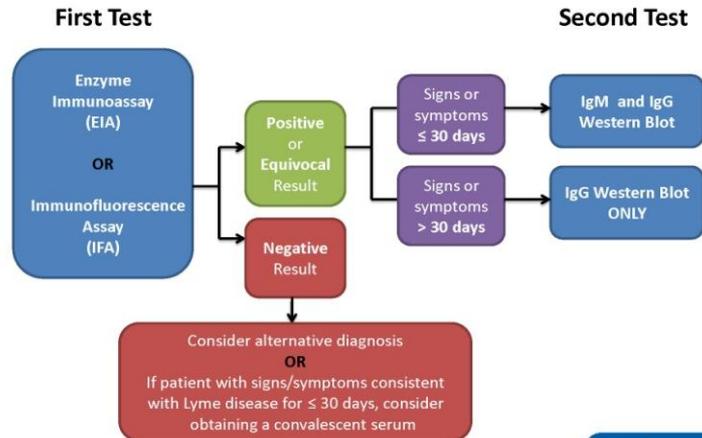
Next steps ... Putting this information to use



Develop Materials to Support Clinicians in their Daily Practice

- ❑ A quick reference guide for tickborne diseases in the U.S., due late 2012
- ❑ Two flow charts regarding Lyme disease testing (www.cdc.gov/lyme/healthcare/clinicians.html)

Two-Tiered Testing for Lyme Disease



National Center for Emerging and Zoonotic Infectious Diseases
Division of Vector Borne Diseases | Bacterial Diseases Branch

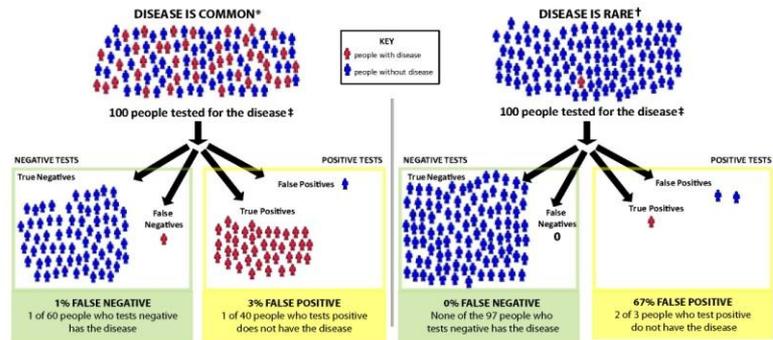


Understanding Test Results for Infectious Diseases

Consider the likelihood of disease *before* performing laboratory testing

The likelihood that a patient has a disease depends on many factors:

- Has the patient been in an area where the disease is found?
- Does the patient have signs and symptoms typical of the disease?
- Does the patient have risk factors for contracting or developing the disease?



* 40 out of 100 patients in this area have the disease.
† 1 out of 100 patients in this area have the disease.

‡ Test specificity = 98% (high) and test sensitivity = 98% (high)

National Center for Emerging and Zoonotic Infectious Diseases
Division of Vector Borne Diseases | Bacterial Diseases Branch



CDC/Medscape Expert Commentary Videos

- ❑ Two-tier testing video: 27K views in first 3 weeks
- ❑ PCR testing video: 12K views in first week

The screenshot shows a Medscape article page. At the top, there are navigation tabs for 'Medscape', 'NEWS', 'REFERENCE', and 'EDUCATION'. A search bar and a 'News' dropdown menu are also visible. The main content area features the article title 'Testing for Lyme Disease: Follow the Steps' by Barbara J.B. Johnson, PhD, posted on 03/05/2012. Below the title are social sharing options for 'Print This', 'Email this', and 'Share'. The article text begins with 'Hello, I am Dr. Barbara Johnson. I am a microbiologist with the Centers for Disease Control and Prevention...' and continues to discuss serologic testing for Lyme disease. A video player is embedded in the article, showing Dr. Johnson speaking. The video player has a progress bar at 00:02 / 04:46. To the right of the article, there is a 'TOPIC ALERT' box stating 'Lyme Disease' is already on the user's list, with an 'Add Other Topics' button. Below that are sections for 'RELATED ARTICLES' (New Human Tick-Borne Infections, Climate Change & Infectious Disease: Is the Future Here?) and 'Editors' Recommendations' (Lyme Disease News & Perspectives, 'Rule of 7's' Shows Accuracy in Lyme Meningitis Prediction). At the bottom right, there is an advertisement for Lyme disease with the text 'I pulled a tick off my leg and now I have a rash ...' and images of ticks. The browser's address bar shows 'Internet' and the page is zoomed to 100%.

Also we've placed three TBD ads on Medscape, free of charge.

Webinars

□ Clinician Outreach Communication Activity (COCA) call

- Lyme disease epidemiology and clinical features
- Presented in March 2012
 - 488 audio lines and 404 webinar links accessed during session
 - 160 participants completed for Continuing Education credit
- Presentation is available at:
<http://emergency.cdc.gov/coca/c612.asp>
- Credits can be earned through February 2013

Webinars

- ❑ **Take Care Health Systems Grand Rounds on Tickborne Disease**
 - Take Care Health Systems provide services for both worksite and walk-in retail clinics (Walgreens)
 - Over 220 participants, mostly PAs and NPs
 - Pre- and post-tests given; results pending
- ❑ **Collaborative process between Bacterial Diseases and Rickettsial Zoonoses Branch, and Division of Parasitic Diseases**
- ❑ **Presented information on Lyme disease, STARI, Rocky Mountain spotted fever, anaplasmosis, ehrlichiosis, and babesiosis**

Materials from Web Site

❑ www.cdc.gov/Lyme/toolkit

- Brochure—Lyme disease: A public information guide
- Fact sheets for—Outdoor workers; hikers; pregnant women, parents
- Radio PSAs
- Trail Sign
- Web widget
- Bookmark
- Worksheet for kids
- Online quiz



New Offerings for the General Public

- ❑ **Updates to www.cdc.gov/Lyme**
 - Interactive Lyme disease map
 - Updated FAQs
- ❑ **Lyme disease prevention bookmarks**
 - 11,000 distributed since February 2012
 - Subsequent printings will include tick removal info
- ❑ **Coming soon—“YouTube”-style video documents one person’s experience with Lyme disease**

More questions?

See www.cdc.gov/Lyme

CDC Home
Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

A-Z Index A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

Lyme Disease

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans through the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash), and the possibility of exposure to infected ticks; laboratory testing is helpful if used correctly and performed with validated methods. Most cases of Lyme disease can be treated successfully with a few weeks of antibiotics. Steps to prevent Lyme disease include using insect repellent, removing ticks promptly, applying pesticides, and reducing tick habitat. The ticks that transmit Lyme disease can occasionally transmit other tickborne diseases as well.

Treatment
Learn more...

Replay Prevention
Signs/Symptoms
Treatment

Email page
Print page
Updates

Contact Us:
Centers for Disease Control and Prevention
Bacterial Diseases Branch
Foothills Campus
Fort Collins, CO 80521
800-CDC-INFO (800-232-4636)

And register for updates!

For more information about the items mentioned in this presentation, please contact Anna Perea at juo1@cdc.gov

For general CDC inquiries:
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.