

### URGENT UPDATE:

The laboratory has now received extended licenses to process samples from the states of Pennsylvania, and Maryland! We have begun shipping kit orders to those health care practitioners that have been so patiently waiting. For new orders, please contact us using the information provided on this form. **Beyond CLIA which covers most states**, the testing laboratory is still awaiting approval of extended licensures in New York, and Rhode Island. Those openings will be announced on the website and newsletter as soon as they come through. Requests for testing kits on file for those states will be immediately filled, so Call or Fax in your order today and receive those kits as soon as the license is received. Again, if you are in **ANY STATE** other than New York or Rhode Island, Spiro Stat can help! **International certifications** are coming as well in order to serve those in Canada, Europe, Asia, and other parts of the world that desperately need the diagnostic tools of the next generation!

### MODERN MOLECULAR ASSAYS CAN DETECT THESE AND OTHER ORGANISMS FROM A SINGLE BLOOD SAMPLE:

<i>Afipia broomeae</i>	<i>Bartonella vinsonii</i>	<i>Leptospira broomii</i>	<i>Rickettsii akari</i>
<i>Afipia felis</i>	<i>Bartonella washoensis</i>	<i>Leptospira fainei</i>	<i>Rickettsii amblyommii</i>
<i>Anaplasma</i>	<i>Borrelia afzelii</i>	<i>Leptospira interrogans</i>	<i>Rickettsii australis</i>
<i>phagocytophila</i>	<i>Borrelia burgdorferi</i>	<i>Leptospira kirschneri</i>	<i>Rickettsii bellii</i>
<i>Babesia divergens</i>	<i>Borrelia garinii</i>	<i>Leptospira noguchii</i>	<i>Rickettsii canada</i>
<i>Babesia duncani</i>	<i>Borrelia hermsii</i>	<i>Leptospira santarosai</i>	<i>Rickettsii japonica</i>
<i>Babesia microti</i>	<i>Borrelia lonestari</i>	<i>Leptospira weilii</i>	<i>Rickettsii montana</i>
<i>Bartonella australis</i>	<i>Borrelia parkeri</i>	<i>Mycoplasma fermentans</i>	<i>Rickettsii parkeri</i>
<i>Bartonella bacilliformis</i>	<i>Borrelia valasiana</i>	<i>Mycoplasma genitalium</i>	<i>Rickettsii peacockii</i>
<i>Bartonella clarridgeiae</i>	<i>Brachyspira aalborgi</i>	<i>Mycoplasma hominis</i>	<i>Rickettsii rhipicephali</i>
<i>Bartonella</i>	<i>Brachyspira</i>	<i>Mycoplasma</i>	<i>Spirillum minus</i>
<i>coopersplainsensis</i>	<i>hyodysenteriae</i>	<i>hyopharyngis</i>	<i>Spiroplasma</i>
<i>Bartonella doshiae</i>	<i>Coxiella burnetii</i>	<i>Mycoplasma salivarium</i>	<i>Treponema carateum</i>
<i>Bartonella grahamii</i>	<i>Ehrlichia chaffeensis</i>	<i>Rickettsia conorii</i>	<i>Treponema denticola</i>
<i>Bartonella henselae</i>	<i>Ehrlichia ewingii</i>	<i>Rickettsia felis</i>	<i>Treponema pallidum</i>
<i>Bartonella koehlerae</i>	<i>Eperythrozoon wenyonii</i>	<i>Rickettsia prowazekii</i>	<i>Treponema pertenue</i>
<i>Bartonella quintana</i>	<i>Francisella tularensis</i>	<i>Rickettsia rickettsii</i>	<i>Treponema vincentii</i>
<i>Bartonella rochalimae</i>	<i>Leptospira</i>	<i>Rickettsia sibirica</i>	<i>Ureaplasma parvum</i>
<i>Bartonella tamiae</i>	<i>borgpetersenii</i>	<i>Rickettsia typhi</i>	<i>Ureaplasma urealyticum</i>

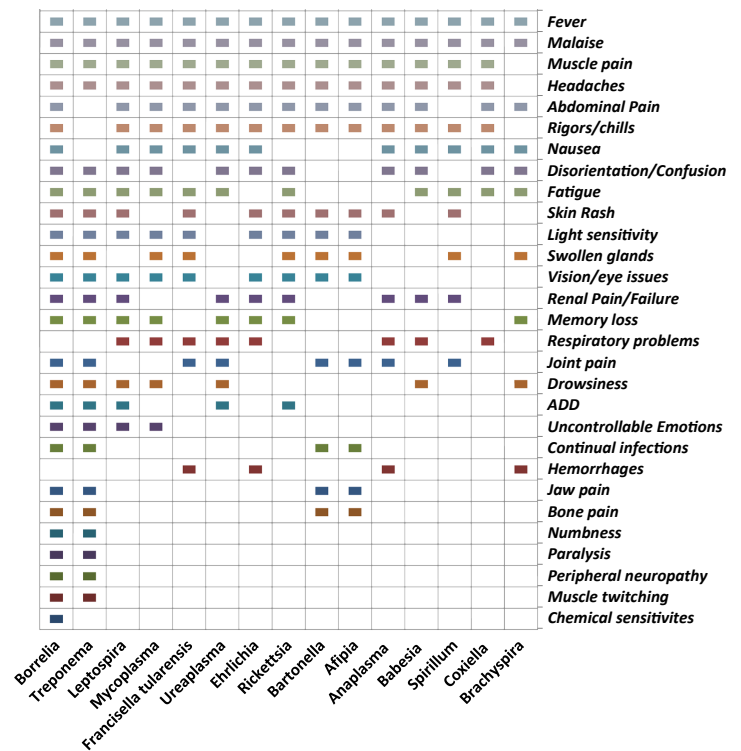
## Why is Lyme disease so underreported?

The answer remains in the **diagnostic dilemma** surrounding the organism *Borrelia burgdorferi*, and extends to other spirochetes and many other fastidious organisms. A fastidious organism is one that either grows extremely slow, or does not grow at all *in vitro*. The term *in vitro* is used to describe something that would occur outside of a living host; such as, in a culture media. Current research indicates that a large percentage of **infections are related to a collective microbial bioburden** (community of multiple organisms), rather than a single pathogenic organism as isolated by traditional microbiological cultural methods. Various scientific disciplines have now documented that traditional culturing methods are limited to the detection of a very small percentage of naturally occurring bacteria. To overcome this limitation, scientist developed very creative and innovative biochemical techniques, like ELISA and Western blot, to indirectly detect the organism by looking for immune system response molecules. Indirect detection is laden with its own challenges. A health care practitioner must request these tests based on individually suspected organisms and groups of organisms, which means they must know what to ask for. This is a difficult task when infections of so many of **these organisms cause very similar clinical representations!** (See Symptomatology chart). The situation is further confounded should there happen to be more than one organism contributing to the infection or disease; such as, *Reckettisia*, *Bartonella*, *Mycoplasma* or *Babesia* are present in addition to *Borrelia*. Furthermore, *Borrelia burgdorferi* and many of these other organisms have been shown to infect and suppress the immune response molecules themselves.

New **advancements** in technology have produced molecular assays that help overcome these issues by directly detecting the genetic markers of the organisms, at the genus and species taxonomic level of all the organisms currently living in the body. **Spiro Stat's** main bacterial and Babesia panels **collectively test for virtually all known vector borne pathogens within a single sample** for a fraction of the cost of indirect detection assays. The same type of universal testing can be applied to the detection of fungi.

## Symptomatology of Spirochetes & Other Vector Borne Pathogens

Summary of Diagnostic Dilemma | Treatment for Infections Vary with Organism



My soul finds rest in God alone; my salvation comes from him. Psalm 62:1



1004 Garfield Dr.  
Lubbock, TX 79416  
Phone: 877-767-7476  
Fax: 806-885-2933  
[info@spirostat.com](mailto:info@spirostat.com)  
[www.spirostat.com](http://www.spirostat.com)