Tickborne diseases occur annually in West Virginia with most cases developing symptoms between April and September. Lyme disease is the most commonly reported tickborne disease in West Virginia. In 2016, West Virginia recorded 368 Lyme disease cases, the most ever in a single year. Counties in the northwestern and southwestern parts of the state have had increasing case counts in recent years. In 2016, 43 counties reported at least one confirmed or probable Lyme disease case. Based on new national reporting standards, West Virginia is considered a high incidence Lyme disease state.

Tickborne rickettsial diseases (TBRDs), such as anaplasmosis, ehrlichiosis, and Rocky Mountain spotted fever, have also been reported in the state. In 2016, 20 TBRD cases were reported in West Virginia. These diseases are characterized by acute onset of fever, headache, and myalgia. Symptoms can also include anemia, leukopenia, thrombocytopenia, and elevated hepatic transaminases. TBRDs can be confused with other illnesses, and serologic results are often negative during the first week of illness.

Laboratory testing is important for diagnosing tickborne diseases. For Lyme disease, a two-tiered testing approach is recommended by the Centers for Disease Control and Prevention (CDC): an IFA/EIA screen followed by IgG and IgM Western blots. For TBRDs, the gold standard test is IFA using pathogen-specific antigen performed on paired serum specimens (one taken during the first week of illness and another taken two to four weeks later). Patients treated early and appropriately with antibiotics (e.g. doxycycline) usually recover quickly from infections with Lyme disease and TBRDs.

Ticks are mostly active during warm months but were reported during winter months this past season. It is important to remind patients to conduct tick checks on themselves (and their pets) when visiting wooded areas. The use of repellent (e.g. DEET, picaridin, oil of eucalyptus) can deter ticks from biting. Please work with your local health department (LHD) to obtain patient information necessary for surveillance. Lyme disease and TBRDs are reportable to the LHD in the patient’s home county within one week.

For more information about tickborne diseases in West Virginia, visit the Division of Infectious Disease Epidemiology (DIDE) website at www.dide.wv.gov. You may also contact your LHD or call the DIDE at (304) 558-5358, extension 1 or the answering service at (304) 925-9946.