## OHIO DEPARTMENT OF HEALTH



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John R. Kasich/Governor

Lance Himes/Interim Director of Health

## MEMORANDUM

DATE:

April 10, 2018

TO:

Healthcare providers in Ohio

FROM:

Sietske de Fijter, MS

State Epidemiologist

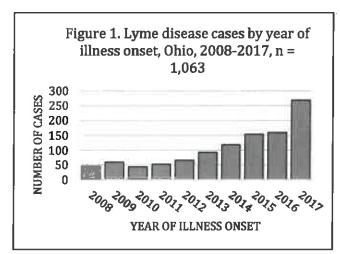
Chief, Bureau of Infectious Diseases

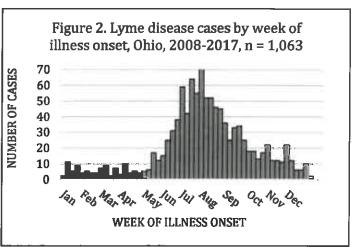
SUBJECT:

Lyme disease cases in Ohio continue to increase

Lyme disease is an emerging disease in Ohio and cases have continued to increase over the past several years, from 45 in 2008 to 270 in 2017 (Fig. 1). This increase coincides with the spread and increase of the principal vector, *Ixodes scapularis* (the blacklegged tick) throughout the state. Lyme disease can be contracted throughout most of the year when blacklegged tick adults and nymphs are active, but most cases occur in the late spring and summer when the nymphs are active (Fig. 2).

## Reported Cases of Lyme Disease in Ohio, 2008-2017





To develop a better understanding of Lyme disease and other tick-borne diseases in Ohio, the Ohio Department of Health (ODH) would like to ensure that all cases are detected. For this reason, ODH recommends that healthcare providers consider Lyme disease and other tick-borne diseases in the differential diagnosis for patients that present with appropriate symptoms.

## Ensuring that Lyme disease cases are properly reported in Ohio

To ensure that Lyme disease cases are confirmed and reported in Ohio, it is essential that there is **both** <u>clinical</u> and <u>laboratory</u> evidence of infection. The Centers for Disease Control and Prevention (CDC) recommends two-tiered serological testing (<a href="http://www.cdc.gov/lyme/healthcare/clinician">http://www.cdc.gov/lyme/healthcare/clinician</a> twotier.html) to properly test for evidence of antibodies against Lyme disease bacteria. Patients should first be tested by enzyme immunoassay (EIA) or immunofluorescent assay (IFA), and positive and equivocal results should be confirmed by further

testing with the more specific Western blot test. Patients may test negative early in the course of infection, so if Lyme disease is suspected a convalescent sample should also be tested. For patients who have been ill for more than 4 weeks, IgG will usually be positive by Western blot; an isolated positive IgM in this timeframe is likely a false positive.

The following tick-borne diseases are Class B reportable diseases in Ohio, and should be reported to the local health department where the case resides by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known:

Anaplasmosis and Ehrlichiosis (<a href="http://www.odh.ohio.gov/pdf/IDCM/ehrl.pdf">http://www.odh.ohio.gov/pdf/IDCM/ehrl.pdf</a>)
Babesiosis (<a href="http://www.odh.ohio.gov/pdf/IDCM/lyme.pdf">http://www.odh.ohio.gov/pdf/IDCM/ehrl.pdf</a>)
Lyme disease (<a href="http://www.odh.ohio.gov/pdf/IDCM/rmsf.pdf">http://www.odh.ohio.gov/pdf/IDCM/rmsf.pdf</a>)
Rocky Mountain spotted fever (<a href="http://www.odh.ohio.gov/pdf/IDCM/rmsf.pdf">http://www.odh.ohio.gov/pdf/IDCM/rmsf.pdf</a>)

More detailed information about Lyme disease and other tick-borne diseases in Ohio, as well as information on personal protection and disease prevention can be found on the ODH website (<a href="http://www.odh.ohio.gov/ticks">http://www.odh.ohio.gov/ticks</a>). Please contact your local health department or the ODH's Zoonotic Disease Program at 614-752-1029 if you have questions.

Thank you for your consideration to improving tick-borne disease surveillance in Ohio.