

PUBLIC HEALTH ADVISORY

August 11, 2005

To: Laboratorians
Subject: Change to Reportable Disease List
From: Fritzi Nelson, Disease Control Manager, County of Santa Cruz

The California Department of Health Services (CDHS) has announced that they have added **West Nile** virus and **Lyme** disease to the laboratory reportable disease list. Both of these diseases must be reported by laboratories to the local health department **within one working day**.

For **Lyme** disease (LD), laboratories should report isolation of *Borrelia burgdorferi* from a clinical specimen, or a positive *B. burgdorferi* serology. The criteria for a positive *B. burgdorferi* serology for surveillance purposes are summarized as follows:

- The algorithm of choice is a two-test approach for active disease and for previous infection using a sensitive enzyme immunoassay (EIA) or immunofluorescent assay (IFA) followed by a Western immunoblot.
- All specimens that test positive or equivocal by a sensitive EIA or IFA should be tested by a standardized Western immunoblot.
- Specimens that test negative by a sensitive EIA or IFA need not be tested further.
- During the first 4 weeks of illness (early LD), Western immunoblot confirmation should include testing for both IgM and IgG. Among persons with an illness duration of more than a month, IgM testing alone is not recommended to assess for active LD (because of the high rate of false positive reactions). Instead, serologic evidence of recent infection is best obtained by testing paired acute- and convalescent-phase serum samples. Serum samples from persons with disseminated or late-stage LD almost always have a strong IgG response to *Borrelia burgdorferi* antigens.
- An IgM immunoblot should be considered positive if two of the following 3 bands are present: 24 kDa (OspC)*, 39 kDa (BmpA), and 41 kDa (Fla) (1).
- An IgG immunoblot should be considered positive if 5 of the following 10 bands are present: 18 kDa, 21 kDa (OspC)*, 28 kDa, 30 kDa, 39 kDa (BmpA), 41 kDa (Fla), 45 kDa, 58 kDa (not GroEL), 66 kDa, and 93 kDa (2).

*The apparent molecular mass of OspC is dependent on the strain of *B. Burgdorferi* being tested. The 24 kDa and the 21 kDa proteins referred to are the same.

For the complete criteria established by the U.S Centers for Disease Control and Prevention (CDC), go to <http://www.cdc.gov/mmwr/preview/mmwrhtml/00038469.htm>. *Continued on next page*



Those laboratories who wish to have the complete *Essential Reporting Guidelines* yellow binder for Santa Cruz County should contact Laurie Lang at 831-454-4275. The binders are free of charge and are also available online at www.santacruzhealth.org. Click on “Public Health”, then click on ALPHA to access the binder.

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.