Clinical Laboratory Test Update

Use of *Legionella* PCR (LAB3460) is preferred over *Legionella* culture for diagnosis of *Legionella* pneumonia from respiratory specimens.

*Legionella* are slow growing, fastidious organisms that require special media, rapid processing of specimens and technical expertise in order to adequately recover these organisms from clinical specimens. These limitations help explain the relatively low ~20-80% sensitivity of culture-based methods for the diagnosis of *Legionella* pneumonia. *Legionella* PCR testing on respiratory specimens (see description below) has been shown to have a higher sensitivity for the diagnosis of *Legionella* pneumonia and has a faster turn around time compared to culture-based methods. The combination of high sensitivity, high specificity, rapid turnaround time, and the ability to detect all *Legionella* species makes PCR the preferred diagnostic for Legionnaires’ disease from respiratory specimens [Clinical Infectious Diseases. 2013;57(9):1275-81].

Culture and isolation of *Legionella* species is rarely clinically useful, and susceptibility testing is only performed in research laboratories. Given the sporadic occurrence of *Legionella* pneumonia in Colorado, routine culture of respiratory specimens for *Legionella* is rarely indicated for epidemiological purposes.

**Legionella Species by Qualitative PCR (LAB3460):** Capable of detecting all *Legionella* species from respiratory specimens and will speciate *Legionella pneumophila* when present. Bronchoalveolar lavage (BAL), nasopharyngeal swabs, sputum and tracheal aspirates are all acceptable specimen types.

Please call Bruce McCollister, MD at 720-848-5874 if you have any questions, or visit our website at [https://www.uchealth.org/professionals/uch-clinical-laboratory/](https://www.uchealth.org/professionals/uch-clinical-laboratory/) for additional information.

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