MEDTOX Laboratories is excited to announce the addition of a new quantitative test designed to detect phosphatidylethanol (PEth). PEth is a direct biomarker for the measurement of binge or prolonged alcohol consumption. PEth may be detectable in blood for approximately 2 to 3 weeks following a period of prolonged, regular alcohol consumption or incidents of ‘binge’ or heavy drinking. PEth is considered less sensitive than EtG or EtS to small amounts of ethanol and does not detect single drink episodes, and similarly, PEth is believed to be insensitive to incidental ethanol exposures such as mouthwash and antibacterial hand cleansers.

The MEDTOX Laboratories’ test for PEth is a fully validated quantitative procedure with a detection limit of 20 ng/mL in blood. The method utilizes state of the art high performance liquid chromatography – tandem mass spectrometry (LC-MS/MS). Test #2804 is performed for clinical applications. Test #2817 is performed for forensic or legal purposes and consists of a secondary conditional confirmation following all initial positive results. Samples undergoing conditional confirmation will incur an additional charge.

PEth levels in excess of 20 ng/mL are considered evidence of moderate to heavy ethanol consumption. However, alternative explanations should be explored following any positive finding. Please note that while PEth is considered relatively insensitive to incidental ethanol exposures (compared to EtG or EtS), the possibility remains that an individual elevated PEth level may result from incidental (or unintentional) ethanol exposure. The Center for Substance Abuse Prevention (CSAP) advises caution in interpretation and use of biomarkers alone to assess alcohol use. Results should be interpreted in the context of all available clinical and behavioral information.

Reference: