

## Making a Difference

Our laboratory has an aggressive research and development program. We have made significant breakthroughs in the field of analytical toxicology by developing procedures to provide advanced forensic toxicology using alternate specimens, such as hair and fingernail. Our research activities are funded largely by agencies within the National Institutes of Health (NIH). We offer customized drug testing for a variety of clients, including research hospitals, reference laboratories, universities and court systems.

### Specializing in Alternate Specimen Toxicology

Douglas Lewis, President and Scientific Director, and Joseph Jones, Vice President of Laboratory Operations, have over 40 years of combined experience in forensic toxicology and are available to answer questions regarding customized assays, research, and reported results. We considered sharing our knowledge an essential part of our contribution to our clients and the communities they serve.



## What We Stand For

### Our Vision

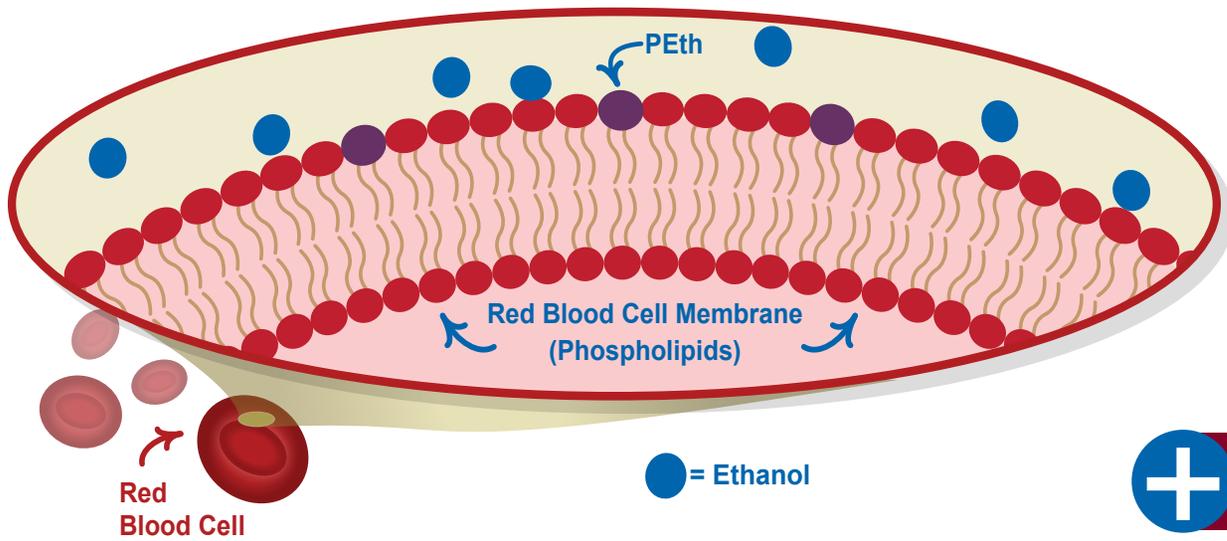
To Enrich and Protect Lives

### Our Mission

Use the best science available to provide cutting edge tools for the analysis and evaluation of exposure to alcohol, substances of abuse, and toxins.

Direct Alcohol Biomarker  
Testing in Dried Blood Spots

# Benefits of Using Dried Blood Spots



**Universal Sample**



**No Notice Needed:** Always Available



**Non-invasive:** Collection Can be Done Anywhere



**Observed Collection:** Sample Collection is Performed by The Donor



**Sample Stability:** Card Binds Blood Cells Preventing Changes to PETH Levels

Detectable  
up to **2-3 Weeks\***

## Testing PEth

Phosphatidylethanol (PEth) is a direct alcohol biomarker. PEth in blood exists as a component of the red blood cell membrane and is an alcohol-specific biomarker, meaning that it is created only in the presence of ethanol. Significant PEth levels can still be detected up to 2-3 weeks after alcohol ingestion. The stability of PEth in dried blood spots makes it ideal for forensic testing and research purposes. Our PEth assay uses state-of-the-art LC-MS/MS instrumentation.

## No Dry Time:

- 1. Puncture
- 2. Collect
- 3. Ship



Dried blood spot collection is quickly becoming the fastest, most convenient way to test for PEth. USDTL provides the collection supplies, which include: 2 lancets, 2 isopropyl alcohol prep pads, gauze, and the dried blood spot collection card. USDTL also provides the custody control form for the collection, which includes all necessary bar code stickers to maintain a proper chain of custody.

Dried blood spot collection is performed by the individual being tested (the donor) and must be observed by a staff member, after a short training session. Sample amount is 5 dried blood spots on the dried blood spot card when collecting from a finger or 5 milliliters of blood, if using standard venipuncture collection with anticoagulant. Results are available 2-4 days after the sample is received in the laboratory.

Our services are not intended to diagnose, treat, cure or prevent any disease. For forensic use only.

\*Detection window limitations are estimates and will vary for each individual donor based on factors such as metabolism, BMI, overall health, etc.