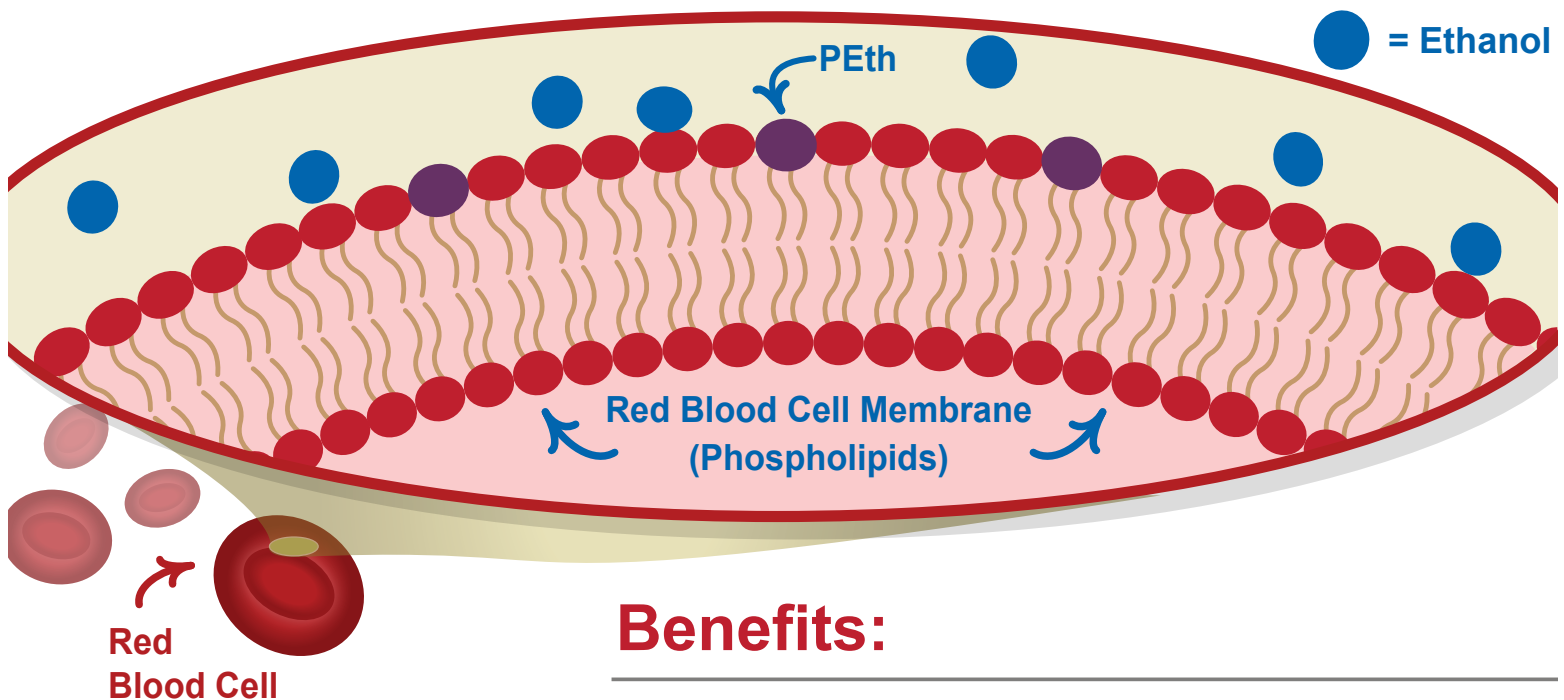


Direct Alcohol Biomarker Testing Phosphatidylethanol (PEth)

When Phospholipase D (PLD) is exposed to ethanol, it forms Phosphatidylethanol (PEth). Once formed, PEth is incorporated into red blood cell membranes. PEth is known as a **DIRECT** alcohol biomarker because ethanol is incorporated into the final compound being analyzed, as opposed to indirect alcohol biomarkers such as: gamma glutamyl transferase (GGT), aspartate amino transferase (AST), alanine amino transferase (ALT), and mean corpuscular volume (MCV), that gauge toxic effects on organ systems or body chemistry.



Benefits:

Unlike indirect alcohol biomarkers...

PEth concentrations are NOT influenced by:

- Age
- Gender
- Certain Diseases
- Other Substances

Collection can be completed and shipped from anywhere without advanced notice*

Half-life
3-5 Days¹

Detectability
2-4 Weeks

1. Viel G., et al. (2012) Phosphatidylethanol in Blood as a Marker of Chronic Alcohol Use: A Systematic Review and Meta-Analysis, International Journal of Molecular Sciences, 13,14788-14812, doi: 10.3390/ijms131114788
* When collected by a trained collector, using USDTL's preferred dried blood spot collection method, no phlebotomist needed. Call Client Services at 800.235.2367 to see how easy it is to collect and ship via dried blood spot.

PEth analysis can be accomplished with a finger stick (dried blood spot) or blood draw (venipuncture).