

For: The State of Maryland February 17, 2020

From: Forensic Fluids Laboratories Inc. (FFL), Kalamazoo, MI 49007

Oral fluid = OF Bridget Lorenz Lemberg, Lab Director/CEO/Toxicologist

About the Lab Director: Bridget Lorenz Lemberg graduated in 1987 with a Masters' degree in Toxicology from the University of Kentucky, and has been practicing Toxicology since that time. She has worked at the KY State Police Central Crime Lab, South Bend Medical Foundation (SAMHSA lab) and one of the first Oral Fluid testing labs in the US, Comprehensive Toxicology Services (2001), moving to another Oral Fluid Lab, ASL Testing, then to FFL (2005). Bridget was instrumental in developing extremely accurate methods for testing Oral Fluid with both ELISA screening and methods for LCMSMS (Liquid Chromatography Tandem Mass Spectrometry for confirming positive drugs down to 0.1ng/mL). She has been testifying about Oral fluid test results, in court, since 2001 in OH, IN, MI, WI, IL, and AZ. She has always qualified as an expert and FFL's OF test results are admitted in court.

About the Lab: Forensic Fluids Laboratories was opened in 2005 as the only exclusive Oral Fluid drug testing lab in the US. FFL has tested over 3.5 million Oral Fluid samples in 23 states, and has a CLIA certification. FFL can test for over 150 different compounds ranging from THC, PCP, Synthetic Fentanyl's, to GHB and Ketamine (date rape drugs). The main customers for FFL are Child Protective Services in many states. FFL started working with the Michigan State Police (MSP) for their first yearlong roadside OF pilot of 5 counties, in November 2017. The DRE's have been the only ones collecting samples, so a field test could also be obtained. MSP only collected 62 laboratory OF tests (with a second lab collection using a Quantisal device), and 92 OF roadside screens using a DDS2/Sotoxa. These were all compared to blood tests collected at a later time. This study was so successful that MSP and FFL started their second year-long pilot, state-wide, in October 2019. To date there has been over 200 laboratory OF samples collected!

About Oral Fluid testing: Oral fluid comes from several major glands, not just the salivary gland (parotid, sublingual, etc.)! It is a reflection of what is in your blood at the time of collection, AND can be collected at the roadside, as close to the time of the accident or incident as possible! Blood samples normally need to have the donor transported somewhere, find a phlebotomist, sometimes get a court order.....this may take several hours, so by the time the blood is collected it will NOT reflect what the levels were at the time of the accident (and could even be negative!). There are many, many scientific papers validating the use of OF as reflective of blood levels. Roadside studies have correlated blood results with OF results at > 98%, when blood is collected in a timely fashion. Roadside OF testing is being conducted in several states: CA, VT, CO, OR, UT, OK, AL, KS, WI, MASS, and MI. There are many countries using OF roadside testing (some of which have picked OF levels for impairment purposes); Argentina, Australia, NZ, Belgium, Brazil, France, Spain, Ireland, Italy, Netherlands, Portugal, Sweden, UK, and our neighbors, Canada. As you can imagine, OF is simple and fast to collect (minutes). FFL turn-around time for positive test results (time for you to receive test results) is 18 to 24 hours after we receive the sample.

Conclusion: Oral Fluid is an excellent sample to collect for DUID as it can be collected at the roadside, fast and easily, and reflects what is in the subjects' blood at the time of collection.

Thank you for the opportunity to provide testimony on SB 309/HB 0808. If you have any questions or need more information, please feel free to contact me at BLemberg@forensicfluids.com or 866-492-2517.