

Dane County Roadside Oral Fluid Project – 2016

The Dane County Oral Fluid Project was funded by the Bureau of Transportation Safety (BOTS)

The scope of the problem:

Drug impaired driving has been on the rise in Wisconsin over the last several years. From 2014 to 2015, drug testing of suspected impaired drivers at the Wisconsin State Laboratory of Hygiene, Forensic Toxicology Section (WSLH) has increased 20% while motor vehicle deaths involving drugs has increased 54% during that same time period. Increased officer awareness of drug impaired driving has helped to define the problem, however, drug impaired driving cases are still difficult for law enforcement to identify and articulate. Roadside oral fluid testing for drugs is another tool officers can use to further support any suspicion that an individual is under the influence of drugs.

The project:

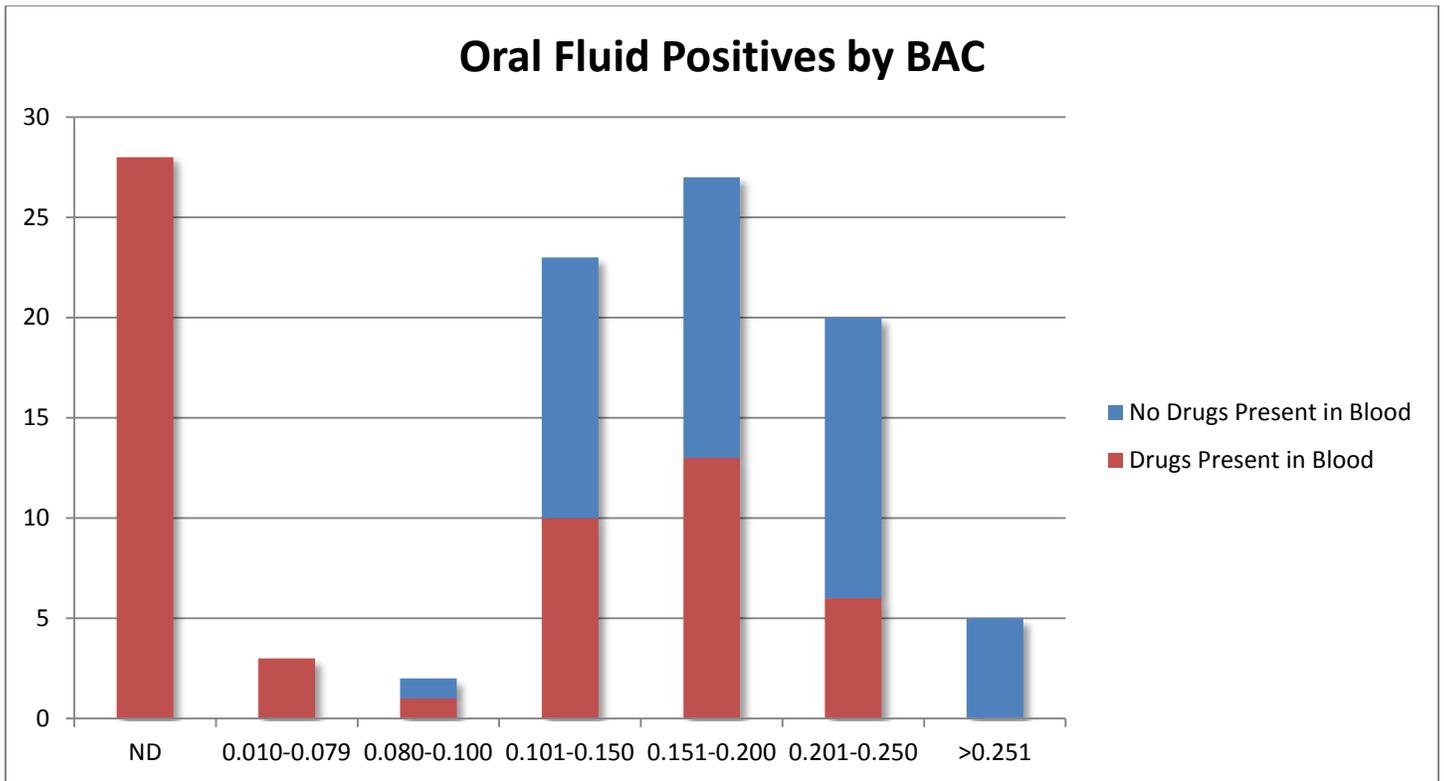
Law enforcement agencies from all across Dane County participated in ARIDE training as well as hands on training on the Alere DDS2 roadside oral fluid device. The goal of the project was to collect 100 roadside oral fluid tests using the Alere DDS2 instrument during a 3 month period and correlate the device results with the blood samples obtained during the OWI arrest process. All comparison samples were de-identified for this project to prevent any traceability between the oral fluid and blood results to any one individual.

The results:

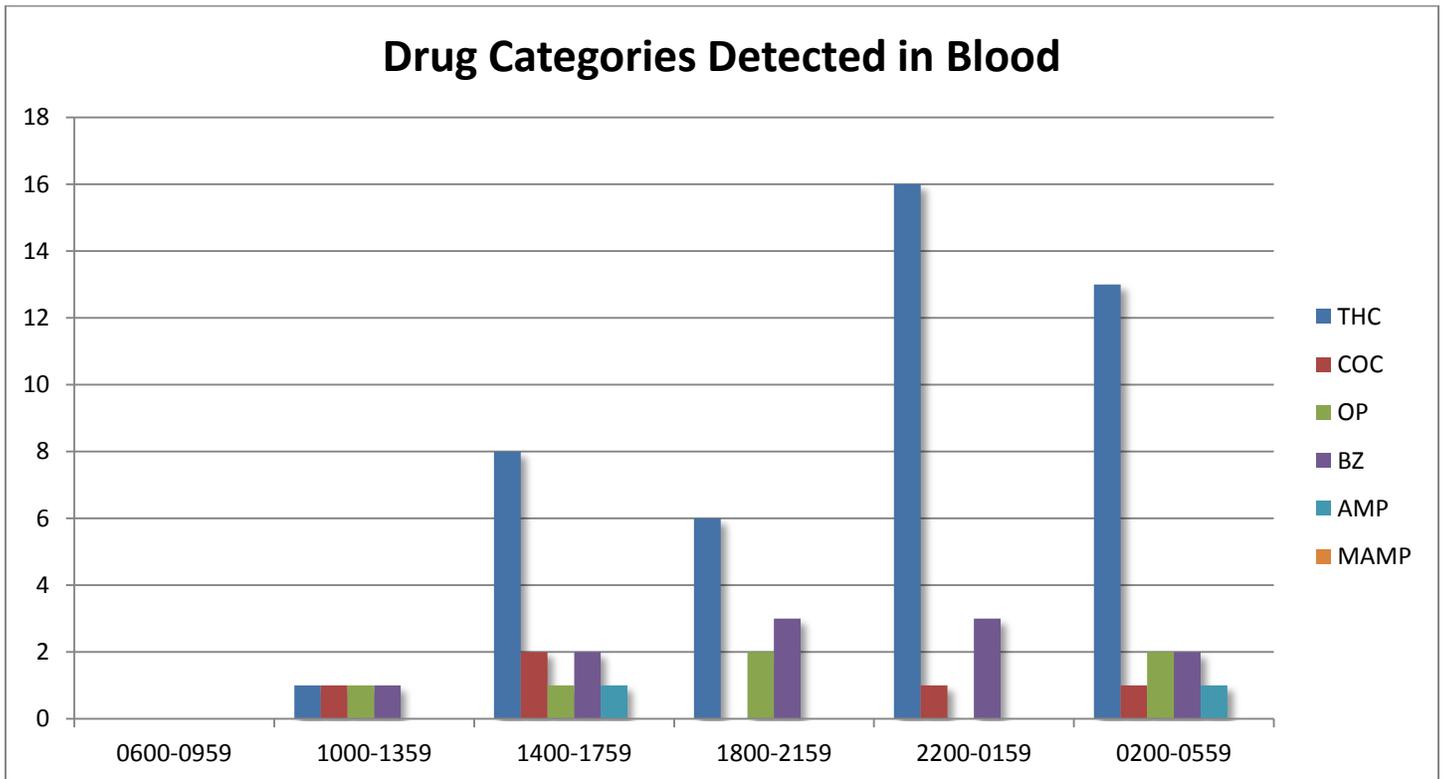
- 104 valid oral fluid collections
- 18 DRE evaluations performed
- 82 male, 22 female
- 13 agencies submitted specimens
- 24 arrests between hours 1000-1800 (23%)
- 76 subjects (73%) alcohol detected
 - 73 subjects had a BAC greater than 0.08%
- 55% of subjects had one or more drug category positive for the oral fluid result
- 17 subjects (16%) had a positive oral fluid result in 2 or more drug categories
- THC #1 detected drug in both oral fluid and blood
- Positive oral fluid results observed at all times of day except 0600-0959 time interval
 - No oral fluid samples collected between 0600-0959
- Correlation between the roadside device and blood results are consistent

Future state:

- Publish results in a peer reviewed scientific journal
- Use the publication, along with others from various projects across the US, to provide information to the legislature and other traffic safety partners to allow for oral fluid collection and the use of the roadside devices during OWI arrests and motor vehicle crashes
- If allowed by the legislature and passed, begin using the roadside oral fluid devices all across the state
- Explore other uses for the oral fluid devices such as Drug Courts, Probation and Parole, schools, etc.



The above chart shows BAC against the number of roadside oral fluid tests and whether there were drugs present (red portion of the bar) or no drugs present (blue portion of the bar)



The above chart shows the time of day the arrest occurred and the number of drug categories detected during that timeframe