

ROADSIDE ORAL FLUID TESTING

Chuck DeWeese

ConnectingclientsLLC@gmail.com

518-727-3203



RESPONSIBILITY.ORG

Roadside Oral Fluid Testing

- **Analyzer** technology- uses lateral flow immunoassay technology
- Easy-to-use **3-step** process
- Sample collection in less than **60 seconds** on average
- Most devices test for common drugs of abuse (e.g., cannabis (THC), cocaine, amphetamines, methamphetamines, opioids, benzodiazepines).
- Rapid screening, with results in **5 minutes**
- Built-in **quality checks** and procedures
- Periodic QC testing
- Storage of over **10,000 tests**
- Print capability



Collection tools

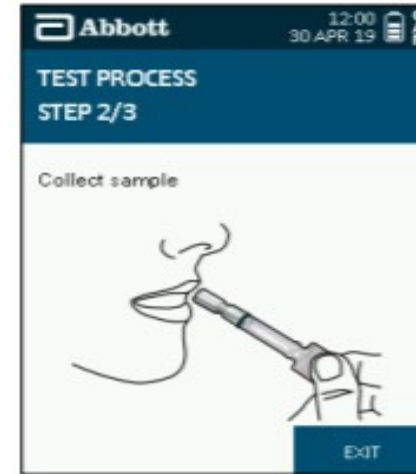
- TEST CARTRIDGE
 - Fully integrated test cartridge containing dried reagents and assay buffer
- ORAL FLUID COLLECTION DEVICE
 - Designed to be robust for active sample collection
 - Sample volume adequacy indicator eliminates the need for timed collections



1 — COLLECT ORAL FLUID SAMPLE

- Turn on the analyser.
- Unwrap a new collection device and offer it to the donor.

Ensure they hold the collection device by the plastic stem.



- Ask the donor to actively swab the collection device around the mouth until the **sample volume adequacy indicator** has started to turn **blue**.
- On average, this takes **less than 60 seconds**.



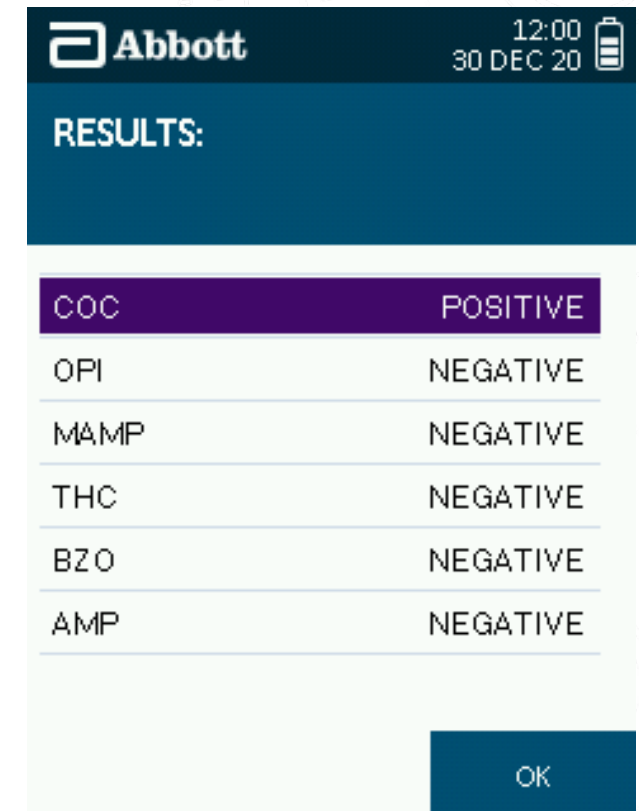
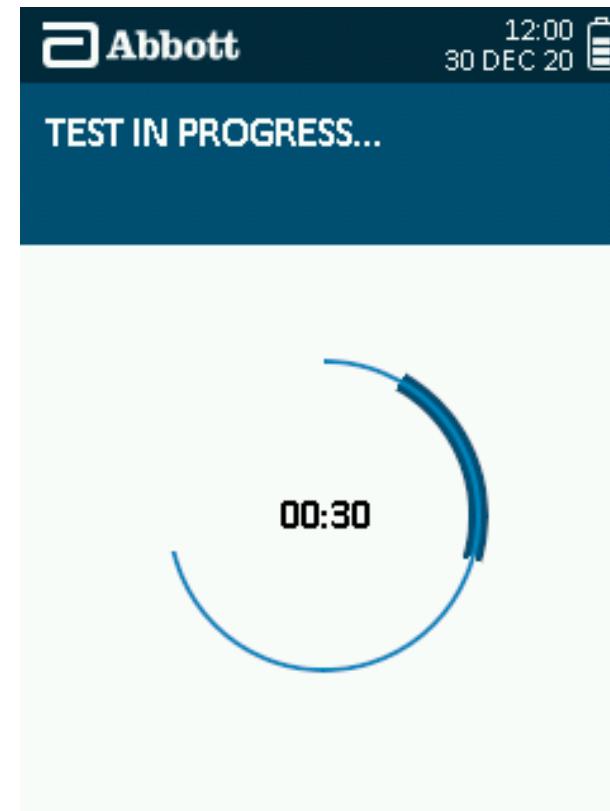
2 – INSERT TEST CARTRIDGE INTO ANALYSER

- Check that the silica gel pack is present, intact and yellow. If the silica gel is missing, open or green, discard the test cartridge and start again with a new test cartridge.



3 — Test takes approximately 5 minutes

- The analyser will display the test result on-screen as **positive, negative or invalid.**



Countries that have implemented oral fluid testing

- ❖ Australia: THC, Methamphetamine
- ❖ Canada: THC, Cocaine, Methamphetamine
- ❖ Argentina, Austria
- ❖ Belgium, Brazil
- ❖ Chile, Columbia
- ❖ France, Germany
- ❖ Ireland, Italy
- ❖ Netherlands, New Zealand
- ❖ Poland, Portugal
- ❖ South Africa, South Korea
- ❖ Spain, Sweden
- ❖ Turkey, UAE
- ❖ United Kingdom (arrests up 600% since implementation in 2015)
- ❖ Vietnam
- ❖ United States

States that have implemented or are preparing to implement roadside oral fluid testing

- ❖ Alabama
- ❖ Arizona
- ❖ California
- ❖ Connecticut
- ❖ Indiana
- ❖ Kansas
- ❖ Michigan
- ❖ Minnesota
- ❖ Missouri
- ❖ Montana

- ❖ New York
- ❖ Nevada
- ❖ North Dakota
- ❖ South Dakota
- ❖ Utah

AND THE LIST IS GROWING!!

Screening vs. Confirmation testing

Oral fluid screening	Confirmation test
Investigative tool used to support probable cause	Evidential test
Sample collected at roadside	Sample collected post-arrest (unless evidential OF)
Analysis conducted at roadside	Analysis conducted in forensic laboratory
Limited test panel (6+ drugs)	Significantly larger test panel (lab dependent)
Qualitative result (+/-)	Quantitative result (ng level)
Real-time information	Analysis can take months
Not used in court proceedings	Key piece of evidence in court proceedings

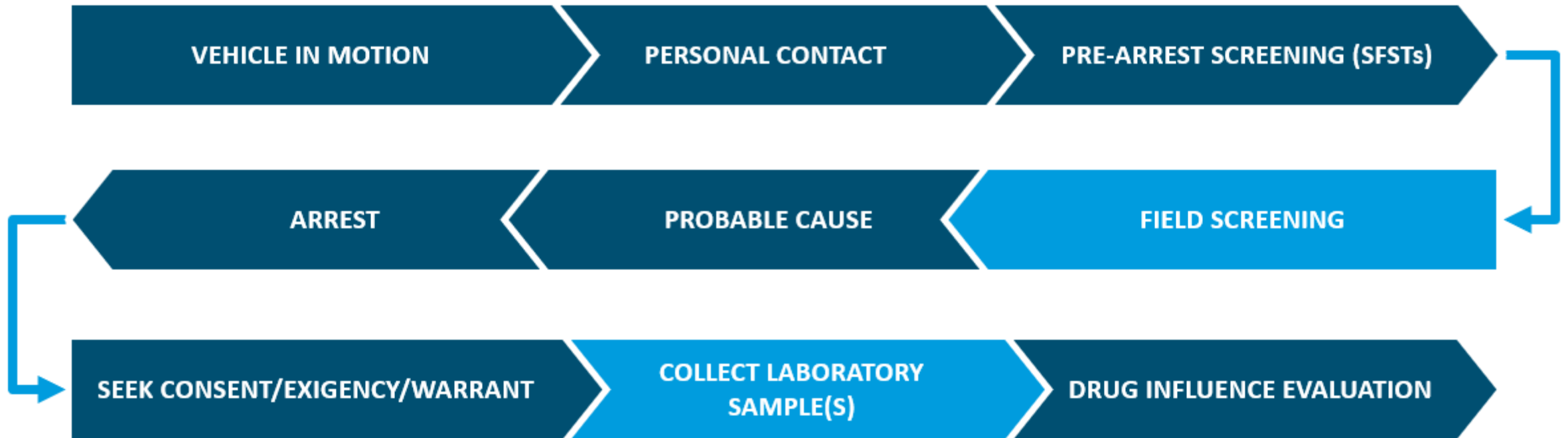
Glossary of Terms

CUTOFF

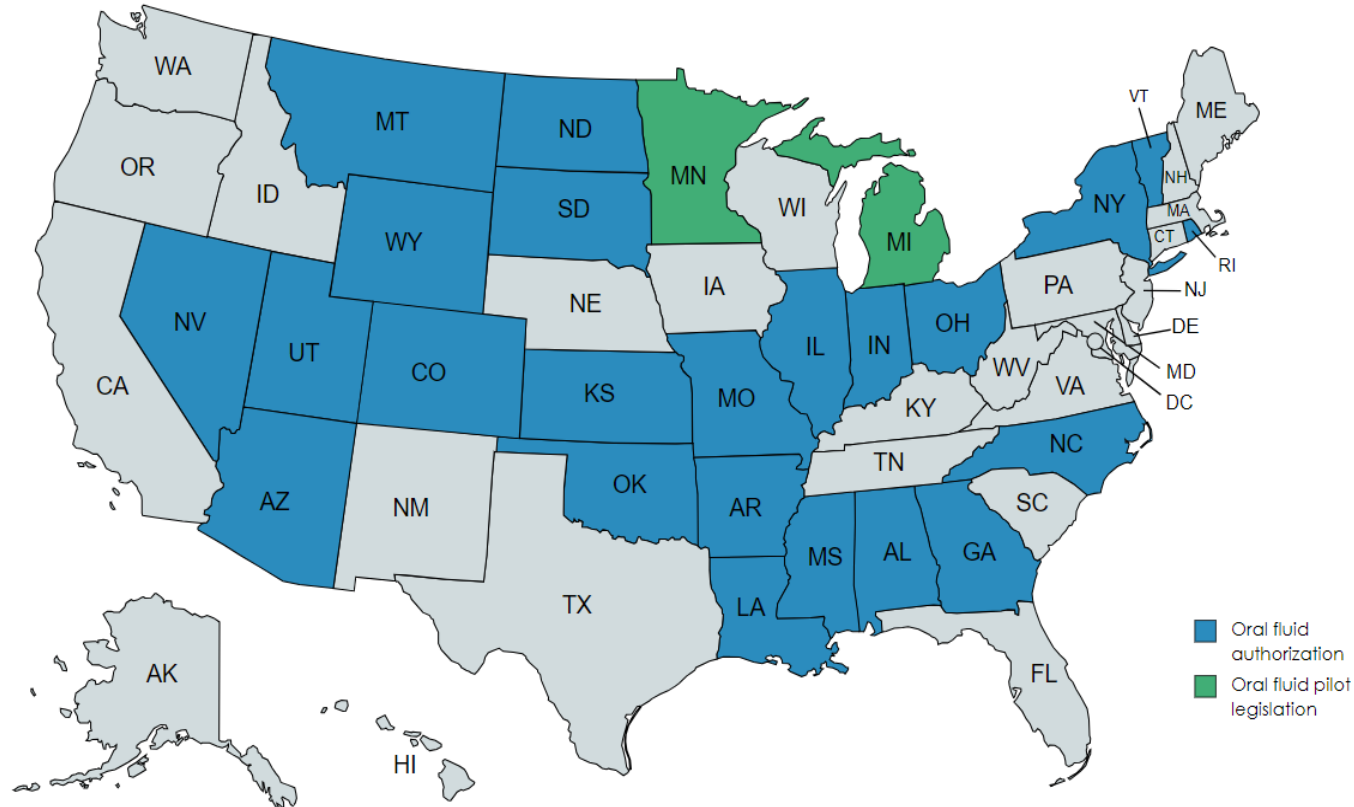
- This is the decision point that differentiates a test result as being either positive or negative.
- The cutoff for a test is given as a defined drug concentration.
- Cutoff levels vary by manufacturer

Drug Group	Target Compound	Cutoff (ng/mL)
Amphetamine	(S)-Amphetamine	50
Benzodiazepine	Temazepam	20
Cannabis	Delta-9-THC	25
Cocaine	Benzoyllecgonine	30
Methamphetamine	(S)-Methamphetamine	50
Opiates	Morphine	40

Impaired driving investigation: Oral



Current policy landscape: Oral fluid authorization



- 23 states have some form of oral fluid statutory authorization.
- 2 states (MI, MN) enacted pilot legislation.
- Approaches to policy vary – implied consent, preliminary testing, pilot/standalone law.
- Passing a law is phase 1.
- Shift away from pilots and studies toward phased implementation approach.

Proprietary and confidential — do not distribute

11



Advantages of roadside Oral Fluid drug testing

- ❖ A reflection of free drug circulating in the blood
- ❖ Easy, rapid, non-invasive, observed collection
- ❖ Sample taken proximate to traffic stop
- ❖ No medical personnel required for collection
- ❖ Parent drug detection shows recency of use
- ❖ Aid the investigative process – help establish probable cause
- ❖ Enhances public safety
- ❖ Supports strategic use of resources
- ❖ Creates general deterrence

Arizona Highway Patrol Accuracy Results

	A	B	C	D
1	Sotoxa Oral Fluid Mobile Test System			97%
2	Date ▾↑	Sotoxa Results ▾	Crime Lab Results ▾	0 = N/A 1 = Right 2 = Wrong ▾
3	11/14/21	AMP,THC,MAMP	MDA, MDMA, Alp, THC, THC-C, THC-H, Fent, Norfent	1
4	12/13/21	THC	THC, THC-C, Diphenhydramine	1
5	12/19/21	None	None	1
6	12/21/21	THC	THC, THC-C, THC-H	1
7	12/21/21	THC	THC, THC-C	1
8	12/22/21	AMP,THC	AMP, THC, THC-C, THC-H,	1
9	12/22/21	THC, COC	Benzoylgonine, THC, THC-C, THC-H	1
10	12/24/21	None	None	1
11	12/26/21	THC	THC, THC-C	1
12	12/28/21	THC	THC, THC-C	1
13	12/29/21	AMP,THC	THC, THC-C	1
14	12/31/21	THC	THC, THC-C	1
15	12/31/21	THC	THC, THC-C	1
16	1/6/22	AMP,THC	Navajo Nation Case - No blood/urine available	0
17	1/9/22	N/A	Navajo Nation Case - No blood/urine available	0
18	1/13/22	THC	THC-C	1
19	1/18/22	AMP,MAMP	MAMP, AMP	1
20	1/25/22	AMP,MAMP	Navajo Nation Case - No blood/urine available	0
21	1/26/22	AMP, MAMP	Amp, Meth, THC, THC-C	1
22	1/28/22	THC	THC, THC-C, THC-H	1
23	1/30/22	THC	Navajo Nation Case - No blood/urine available	0
24	2/7/22	AMP,THC,MAMP	MAMP, AMP, THC, THC-H, THC-C	1
25	2/7/22	THC	THC, THC-C, THC-H	1
26	2/12/22	THC	THC, THC-C	1
27	2/13/22	THC	Alp, THC, THC-C, THC-H	1
28	2/14/22	THC	THC, THC-H, THC-C	1
29	2/15/22	AMP,MAMP	MAMP, AMP, THC, THC-C	1
30	2/26/22	THC	THC, THC-C, FENT	1
31	2/27/22	AMP, BZO, MAMP ,OPI	Amp, Meth, Alpraz, Alpha-Hydroxyalprazolam, Dihydrocodeine, Hydrocodone, Hydromorphone, Fent, Norfent	1
32	2/27/22	AMP, MAMP	Amp, Meth, Fent, Norfent	1
33	3/2/22	AMP,MAMP	MAMP, AMP	1
34	3/4/22	AMP	MAMP, AMP	1
35	3/5/22	AMP, THC	THC, THC-C, THC-H	1

Thank you for your time and attention!!!

