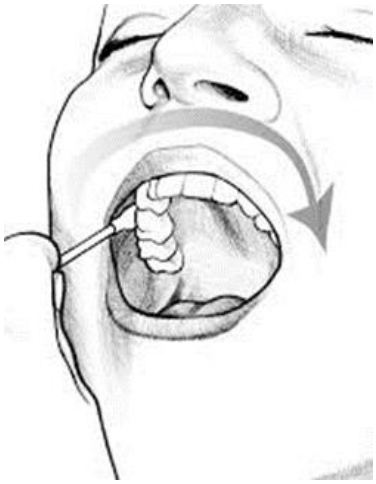
AS/NZS 4760:2019 Oral Fluid Testing

Update – The Drug Detection Agency (TDDA) NZ has recently advised that it now has a verified OFT device, a verified test transportation device, and here in NZ – that there is an accredited laboratory (Canterbury Health Laboratories) for confirmations – see IANZ website (right at the end of the document on page 16). In other words, TDDA can now provide Oral Fluid Testing (OFT) services in compliance with the AS/NZS 4760:2019 standard – News that has been eagerly awaited!

NZ Businesses have Reservations!



NZ businesses, particularly those with safety sensitive workers, have eagerly awaited the production of verified OFT devices and NZ based accredited laboratories for confirmations, to take advantage of the benefits offered by OFT especially as the test is considered less invasive than urine testing.

However, since our last update the **Fair Work Commission of Australia** (FWC) has released three decisions that have cast doubts on the efficacy of OFT. Ironically, Australian businesses, once at the forefront of OFT are now seeking **court rulings to introduce urine testing**, primarily because of its "…providing superior drug detection." These rulings and other studies have certainly caused NZ businesses to re-think – and some will stay with urine testing! Why?

Efficacy of OFT vs Urine – Christie & Lewis 2011

- The paper, Christie &Lewis 2011 (linked above), is a complete analysis of OFT vs. Urine testing.
- While written in 2011 John Lewis has recently commented that "… nothing much has changed" – in essence, the 2011 report can be relied upon as accurate for use in making decisions today.

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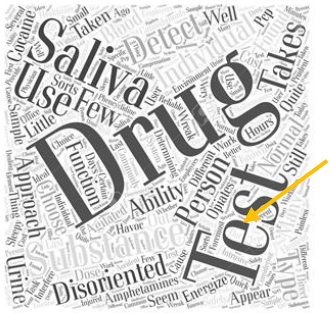
What Do the Researcher's Say?



A Sydney Trains Study, published in the Journal of Analytical Toxicology, 2016;40;479-485 (and the Australian National Library of Medicine) reports that in "1,500 paired urine and oral fluid tests" … "substances were detected in 3.7% of urine samples and 0.5% of oral fluid samples". **Why the difference?** Christie and Lewis state on page 11 (5) that the "detection of cannabis by Oral testing is difficult…" in fact "unreliable".

What differences exist between the two testing methodologies? – OFT has a shorter window of detection, hours, compared to urine screening, which can detect use after several days. OFT is therefore seen to align more closely with the very recent use of drugs (intoxication), but not detect drug use during the withdrawal (hangover) stage **when safety risks are 'high to severe'** – see the table on p. 6 of Christie and Lewis that shows the impairment risks during the time stages of drug use:

Impairment risk	Risk during intoxication with low to moderate dose	Risk during intoxication with high dose	Hangover risk	Ongoing risk is chronic/ dependent users
Cannabis	**Moderate**	**Moderate to high**	**Low**	**Moderate**
Psychostimulant (mathamphetamine, ecstacy, cocaine)	**Low**	**Moderate to high**	**High to severe**	**High to severe**
Opioids	**Moderate to high**	**Severe**	**Low to moderate**	**High to severe**
Sedative benzodiazepines	**High to severe**	**Severe**	**Moderate to high**	**High to severe**

On p. 13 Christie and Lewis comment that OFT "…has serious shortcomings with a high likelihood of failure to detect use." This statement is borne out in the data recorded by **Victoria and Queensland Police from random screenings** (see p. 15) where OFT detected Methamphetamine but not cannabis use in drivers, whereas research shows that cannabis (THC) is most commonly the drug used by drivers.

They further add… "This confirms that oral screening for cannabis is very insensitive to … THC."

In view of this research, PF Olsen is reluctant to rely on OFT for two important reasons: (1) Detecting recent use (particularly of our most prevalent drug – Cannabis/THC) using OFT could be unreliable; and (2) OFT cannot detect drug use during the hangover stages when safety risks are significant!

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