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We are submitting some comments about the Guidelines for Federal Workplace Drug Testing Programs:

1.. The Guidelines consider oral fluids "not suited for return to duty and follow-up testing" because of the relatively short detection window. However, we think that oral fluid would be useful for return to duty and follow-up testing since it informs recent drug use and should not be confused with carry-over from previous use.

Based on Cone's study (Cone et al., J. Anal. Toxicol., 26, p.541-546, 2002), we think that oral fluid could be also suited for random testing. This study showed that oral fluid testing of over 77,000 specimens produced nearly identical detection rates compared to urine testing.

b.. "For oral fluid, the Department is proposing that 2mL be collected in a collection tube rather than allowing oral fluid to be collected directly into a collection device that does not provide an accurate measurement of the volume of oral fluid collected". In fact, our experience in collecting oral fluid from 561 truck drivers (data not published yet) showed a variable volume of collection (0.2 to 3mL) using the Salivette device (Sarstedt, Germany). However, the collection of oral fluid by spitting in a container is impractical and uncomfortable for the donor, especially while being observed. An alternative for collection of oral fluid could be the use of a collection device that uses an absorbent cotton pad with an indicator handle, which indicates that a specific volume has been collected on the pad. Certainly, as mentioned in the Guidelines, mechanical saliva stimulation, as well as salivary pH and individual differences, affect drug concentration in oral fluid. However, this variation is not unlike the situation observed in urine collection. It is commonly accepted that there is great variability associated with urine production, and consequently, the drug urinary concentrations of individuals. Collecting oral fluid with a device with an indicator handle could, at least, standardize the collected volume. Besides, the use of citric acid in these devices to stimulate salivation could help in some cases of "dry mouth".

c.. We think that oral fluid testing could be useful in verifying recent consumption of alcohol.

d.. "To ensure that a THC result on an oral fluid specimen is from active exposure, the Department is proposing to always collect a urine specimen with an oral fluid specimen that would available in case the oral fluid specimen was positive for THC". We think that this requirement is not practical and probably will invalidate oral fluid testing for marijuana. Taking into consideration the fact that oral fluid indicates very recent use of marijuana and there is a lag time (4 to 6 hours) (Niebdala et al., J. Anal. Toxicol., 25, p.289-303, 2001) to urine positive for cannabinoids, it is quite possible that a positive result for oral fluid and a negative result for urine would be obtained after an eventual use. Besides, Niebdala et al. (2001) found no detectable cannabinoids in saliva after passive exposure to marijuana smoke (Niebdala et al., Anal. Biochem, 293, p.22-30, 2001). In spite of this, we agree that more studies are necessary "to differentiate between actual use and environmental contamination".

e.. With regard to testing hair specimens, the Guidelines suggest that "hair may be used for return to duty and follow-up testing, depending on the time of last known drug use". Nevertheless, we think that hair analysis could not be suited for these applications, since negative results do not necessarily mean

abstinence, and positive results could be due to the carry-over effect. Mauricio Yonamine Toxicology College of Pharmaceutical Sciences University of São Paulo Brazil

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