

WHITE PAPER SERIES



SALIVA VS URINE TESTING

ABSTRACT

A key distinction when choosing Urine or Saliva is to consider that apart from risk minimisation, consideration must be given to the lifestyle implications for the employees and contractors themselves.

By Cathy Nutt

INTRODUCTION

The type of drug testing an organisation should use, saliva or urine, is often a contentious question. And getting an answer to this question often proves challenging as the industry is often full of vested “self-interest” answers, confusion or miss-information.

The choice may seem an easy one but in reality it often isn't, with multiple considerations required before selection of the appropriate technique. Organisations may be driven to a single choice by regulation within their specific industry while others have more freedom to select their approach. This white paper seeks to inform and position the two techniques to assist in the choice of saliva vs urine testing.

SALIVA

Saliva is the watery and usually somewhat frothy substance produced in the mouths of some animals, including humans, secreted by the salivary glands. Human saliva consists of 98% water, while the other 2% consists of electrolytes, mucus, glycoproteins, enzymes, and antibacterial compounds. The average adult produces in excess of one thousand millilitres of saliva on a daily basis.

URINE

Urine is a sterile liquid by-product of the body secreted by the kidneys through a process called urination and excreted through the urethra. Cellular metabolism generates numerous by-products, many rich in nitrogen that require elimination from the bloodstream. These by-products are eventually expelled from the body during urination, the primary method for excreting water-

soluble chemicals from the body and can be detected and analysed by urinalysis.

DRUG TESTING

Drug testing is a technical examination of biological specimens, for example; saliva, urine, hair, blood, breath-air or sweat to determine the presence or absence of specific parent drugs or their metabolites.

The choice of biological specimen to be tested will determine the time range of detection; saliva tends to be near-instant to a 24 hour period while hair tends to test within several days to several months.

The time frame required tends to be an important consideration; Saliva based drug tests can generally detect use during the previous few days and is known to be better at detecting very recent use of a substance and therefore is growing in acceptance as a method for fairly testing whether an employee is fit for work without unduly testing for something they may have done days or weeks.

When a urine test is requested the employee or patient is typically instructed to go to a designated collection site. The urine sample

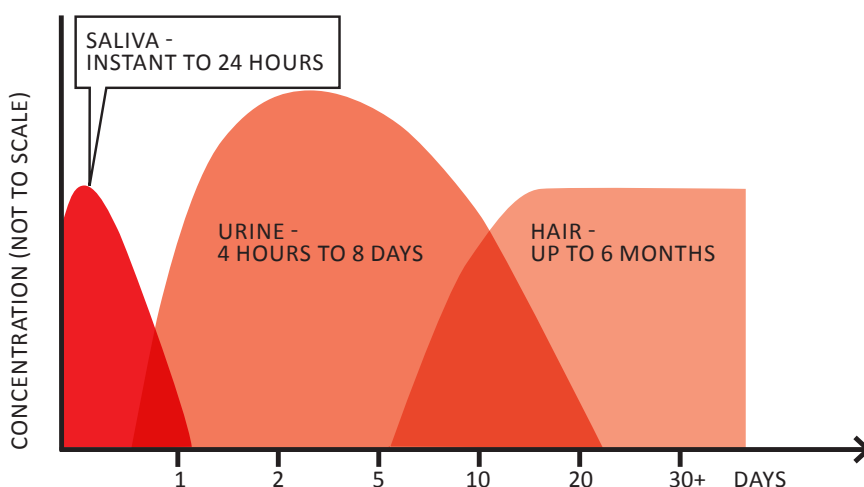
goes through a ‘chain of custody’ to ensure validity. The urine sample is collected at a remote location in a specially designed cup, sealed with resistant tape and sent to a testing laboratory to be screened. Urine based drug tests can generally detect use from up to 8-10 days.

A DECISION PROCESS

People continuously ask the question of urine vs saliva and what is the most appropriate form of testing for a given business type; many organisations find this topic confusing and often struggle to find an objective opinion.

Recent ‘Fair Work Australia’ decisions around workplace drug testing are a topical discussion point with the recently resurrected case of **Endeavour Energy v CEPU**. This was an appeal which related to the 2012 decision in which saliva drug testing was the method approved by the Commission. With saliva testing holding firm, the appeal failed for Endeavour Energy.

SALIVA, URINE AND HAIR TESTING



Fair Work Australia

CFMEU v SHELL [2008] “Shell ordered to use ‘less invasive’ oral drug testing”.

CFMEU v HWE MINING PTY LIMITED [2011] “There are ‘compelling rational reasons’ for regarding saliva testing as less effective than urine testing”.

ENDEAVOUR ENERGY v CEPU [2012] “Introduction of urine testing would be ‘unjust and unreasonable’ in view of the availability of saliva testing”.

ENDEAVOUR ENERGY v CEPU appeal [2014] “Fair Work Commission refused to change its decision to turn down Endeavour Energy’s bid to conduct urine tests”.

Following reviews of these cases, one can conclude there is actually no “right or wrong” approach when it comes to the method of drug testing chosen for a workplace. Additionally, it would seem unrealistic to rely upon Fair Work outcomes setting the workplace standard for drug testing.

Many hours can be consumed researching Fair Work Australia decisions, laboratory and field trial research and even anecdotal evidence for or against either drug testing method. This has the potential to be an endless and time consuming game.

A key distinction when choosing Urine or Saliva is to consider that apart from risk minimisation, consideration must be given to the lifestyle implications for the employees and contractors themselves.

TESTING CONSIDERATIONS

There are many workplaces around Australia conducting drug testing with Urine or Saliva and all are effectively minimising the risks posed by drug use.

Each workplace must consider their specific circumstances and make a decision on what is best given their risk profile, employee demographic and desired outcomes.

SALIVA VS URINE TESTING

When preparing to deliberate over which method to employ, it is important to consider the following:

- **Saliva testing is more likely to be accepted by a workforce** as fairer and more relevant to fitness for work.
- **No drug testing initial screening method is “infallible”** – therefore is it worth debating the fine details when each will result in both risk minimisation and deterrent against drug use?
- **Saliva drug testing technology continues to improve.** Many of the reasons Urine testing was once considered the best approach are no longer applicable. For example, in the past, the lack of an Australian Standard for Saliva and limited options for laboratory confirmation of saliva samples were commonly raised as issues.

THE NEXT STEP

Armed with the above information, the first step in selecting the drug testing method for your workplace should answer the question “Do you wish to monitor recent use of drugs (12 to 24 hours) or historical use (48 hours to several weeks) among your employees and contractors?”

Once a decision is made regarding Saliva or Urine or perhaps both is the best solution, the next step is to consider the equipment that will best suit your budget requirement, time or workplace constraints.

The end result needs to be kept in mind whatever the decision which is, deterring people from arriving or working under the influence of drugs, placing themselves and others at risk of injury or even death in the workplace.

CONCLUSION

Saliva vs. Urine testing remains a contentious questions, but it is unnecessarily contentious. Unless there are specific industry regulations and guidelines for one technique over the other employers are free to evaluate the most appropriate testing regime for their operational environment, their risk management regimes, the lifestyle implications of their staff, and even their budget.

Alcolizer believe a well-designed Acoholol and Drug testing program helps employers and employees stay safe; a good AOD programs delivers on “the right not to offend” and provides for a safer working environment for everyone.

For more information regarding Alcolizer Technology’s Drug testing plans and associated Training & Education programs, contact Alcolizer on 1300 789 908 or talk to a sales specialist.

ABOUT ALCOLIZER TECHNOLOGY

Alcolizer Technology is a world-leader in the field of Alcohol and other Drugs (AOD) testing and is recognised as one of Australia's most innovative and forward-thinking company's.

Headquartered in Brisbane, Australia, we have been one of the world's leading manufacturers of alcohol breath testing equipment for almost 25 years; law enforcement agencies, industry and personal users trust Alcolizer to keep themselves and their employees safe.

Alcolizer is the largest provider of Breath Testing devices to Australian Police and the largest provider to the Australian Resource sector. Our products are built in Australia, for Australia, but shipped around the world wherever people value quality, reliability and innovation!

As our company name implies, we started out in alcohol breath testing and quickly became a leader in the field. In 2012 Alcolizer continued its track record of innovation and launched Druglizer™, an industry leading drug testing service designed to complement its financial investment in Oxford University start-up company OxTox.

At Alcolizer, we believe alcohol and drug testing is critical for personal safety and a safe and productive work place. So whether you are a law enforcement agency, need industrial-scale testing or are a personal user, you can trust Alcolizer Technology to be at the forefront of alcohol and other drugs testing technology, with world class products and services to support you wherever you are.

As a technology company focussed on Alcohol and other Drugs testing, our dedicated R&D teams keep us at the forefront of the AOD industry, our in-house manufacturing expertise gives us full control over product quality, and our dedicated and professional sales team is focussed on meeting the individual needs of our customers. We complement this with tailored education programs to help our customers meet the challenges of AOD program deployment and our factory certified technical support & service specialists providing the industry's best support when, and where, you need it.

With leading-edge products and services, we are a world leader in our field.

ABOUT THE AUTHOR

Cathy Nutt is the National AOD Operations Manager for Alcolizer Technology based in Brisbane and reporting directly to the General Manager. Cathy is responsible for nationwide delivery of Alcolizer's drug testing service and works directly with the sales team on preparing proposals and coordinates Alcolizer's Drug Control officers (DCO's) nationwide to ensure service delivery to agreed customer service levels.

Prior to joining Alcolizer, Cathy spent eight years at the Australian Sports Anti-Doping Authority (ASADA), as a Doping Control Officer (DCO) responsible for the testing of elite Australian athletes undertaking the location and collection of samples from athletes across all sports and competition levels, including

international competitors, from one on one collection to testing entire teams.

In 2007, Cathy was the Casual Education Office at ASADA responsible for the provision of concise Anti- Doping information and the delivery of the ASADA message to groups of athletes and their support personnel across all sports subject to anti-doping legislation. The role included liaising with trainers and coaches to determine their specific requirements and expected outcomes for each session. The education arm forms a component of the doping deterrence program in addition to providing information to athletes assist in preventing inadvertent doping. Her background in Drug education and awareness continues today as she helps Alcolizer to develop its comprehensive range of Education & Training programs in AOD.

