

INDUSTRY SEGMENTATION – BREATHALYSERS

It is estimated that 5 - 10 percent of workplace deaths and 10 percent of workplace injuries are due to drug or alcohol and may have been prevented if the subject was tested using a mining industry breathalyser or drug test kit. These alarming figures are the reason why worldwide alcohol and drug related problems cost more than \$3.5 billion per year, not to mention the significant lost productivity and absenteeism.

MINING

While mining industry breathalysers and drug testing equipment test for alcohol or drugs in the human body, mining operators also need to remember the risks of actual effects of the alcohol and drugs on the employee's body. When implementing a workplace drug and alcohol policy, miners should tailor it to their own individual site requirements. The policy should identify hazards inherent with the use of alcohol and drugs in the workplace, the risks associated with them and the control strategies for those risks including the use of mining industry breathalysers.



A mining industry breathalyser must adhere to ISO International Standards and must be certified for legal and quality assurance reasons, and it should be regularly calibrated to the manufacturer's recommendations in order to maintain its accuracy. While mining industry breathalysers and drug test kits effectively test for the alcohol or drugs in the body, mining operators also need to manage the risks of the after effects of alcohol and drug use. E.g. a mining employee could present with a hangover after consuming alcohol the day/night previously and may also still have a blood alcohol concentration higher than what is permitted at the workplace. Only a high quality mining industry breathalysers should be used to manage this risk.

AFFECTED INDUSTRIES

The law doesn't specifically make reference to the use of breathalyser tests in the workplace, or mention if it can be forced on an employee or not. But, it's clear from industry practices and case law that you need to have an alcohol abuse policy in place. In fact, there are four industries that are vulnerable and should adopt clear alcohol policies backed up through the use of breathalysers.

A breathalyser test is used to measure the blood alcohol level of a person by means of a device called a breathalyser. This device measures the blood alcohol content (BAC) from the breath of a person, usually the legal blood alcohol limit is app 0.5% or 0.24mg per 1000ml breath, however, many organisations have a Zero alcohol tolerance level due to the safety concerns. While breathalysers can be used in any industry and any workplace, there are four industries that frequently undertake breathalyser tests.

#1: Food and beverages industry – These employees work with the manufacturing of food and beverages. If they're intoxicated while working, they could seriously injure themselves or others.

#2: Factories Manufacturing – Machinery used while under the influence of alcohol is one of the leading causes of accidents in the workplace. Employees under the influence of alcohol don't follow the safety precautions for machinery and could hurt themselves or fellow workmates.

#3: Companies that make use of motor vehicles or trucks – The Road Traffic Act prohibits a driver to operate a car or truck while under the influence of alcohol for obvious reasons.

#4: Mining sector – Mines have a general 'no tolerance' policy for alcohol consumption at work. This is because of the high risk work that employees are involved in.

ALCOHOL POLICY GUIDE

Soteria Africa / Breathalysers Zambia are in a position to assist businesses with the creation of specifically designed Alcohol Policy that is clear, effective and easy to implement. There are 10 key points that all businesses must ensure are included in any alcohol policy that they intend to implement.

KEY POINTS

1. The company must provide a statement of the purpose and objectives of the policy.
2. The company should define what alcohol abuse is and state that it has a 'zero tolerance' policy for alcohol use at work.
3. Must include the relevant legislation in its policy, like the General Safety Regulations.
4. The company must indicate who is covered by the policy, for example full time staff and employees and contractors.
5. The company must include a section on what your employee's rights are.
6. The policy must state employees suspected of having consumed alcohol will be required to undergo a breathalyser test.
7. The company must include a section for disciplinary action should employees be found to be under the influence.
8. The company can include a section for an employee assistance programme for employees with addiction problems.
9. The company must include a confidentiality clause in the policy.
10. The company must monitor and review your policy at least every 12 months

RANDOM BREATH TESTING

In a number of countries around the world state and federal policing agencies conduct **random breath testing (RBT)** operations of drivers operating motor vehicles. These include motorcycles, cars, trucks', buses, taxis and any other type of vehicle that drives on their roads. Blood alcohol concentration limits vary, as do the penalties for each type of driver's license holder.

What many people don't realise is that today, **random breath testing** extends far beyond the police officer and the motorist. *Random breath testing* in the workplace has become exceedingly more common in "**high risk injury**" workplaces. These workplaces include places where heavy equipment, machinery, or lots of vehicular movements occur. For example, **random breath testing** is conducted in industries such as mining, transport, heavy industry, engineering factories, coal handling, iron ore handling, shipping, rail, to name but a few.

FACTORS

There are a range of factors contributing to alcohol use by employees in the workplace and are generally things that cause anxiety or stress, and may include:

- ✓ Shift work and long shifts
- ✓ Noisy work environments, equipment that is difficult to use, high risk of personal injury or illness
- ✓ poor job design, including boring or extremely demanding work, unrealistic targets or inadequate resources
- ✓ inadequate training or supervisory support
- ✓ Bullying, harassment, discrimination or victimisation in the workplace
- ✓ Access to alcohol at work, peer pressure or a culture tolerating or encouraging alcohol use during or after work hours.

There are a range of strategies businesses can implement to reduce to the risk of alcohol issues in the workplace. Effective responses should be tailored to best suit the needs and situation of the individual workplace and involve a range of strategies, incorporating:

- **Policy:** Policy provides the foundation. It outlines the formal process for responding to alcohol issues in the workplace and provides a guide for the roles and responsibilities of all staff.
- **Education and Training:** Can assist with the prevention of alcohol-related harms
- **Counseling and treatment:** support for employees with alcohol issues

Though random breath testing can help businesses monitor their employees, potential risks and especially those responsible for heavy machinery, prevention strategies, policies and education are always the best way to minimise risk when it comes to employee and workplace safety.

INTERESTING FACTS

WHAT IS ALCOHOL ABUSE?

- ✓ Alcohol abuse can be referred to as the over indulgence or excessive usage and dependence on alcohol that acts on the central nervous system to alter brain functions. This typically results in temporary changes in perception, mood, consciousness and behaviour leading to effects that are harmful to a person's physical or mental health or the welfare of others.

EFFECTS OF ALCOHOL ABUSE ON THE BODY:

- ✓ Physical Effects – poor vision, poor co-ordination, poor reaction speed
- ✓ Mental Effects – poor concentration, lack of morale, low self-esteem

EFFECTS OF ALCOHOL ABUSE ON COMPANIES:

- ✓ Increased health and safety risks – more accidents occur
- ✓ Decreased productivity – staff are not as productive at work
- ✓ Increased absenteeism – staff often miss more days from work
- ✓ Increased health costs
- ✓ Labour turnover increases
- ✓ Increased legal liability
- ✓ Conflict in the workplace

DID YOU KNOW?

- ✓ “Just two drinks” is in fact over the legal limit for members of the public driving.
- ✓ “Just one drink” is in fact over the legal limit for Professional Drivers

WHAT CONSTITUTES "JUST ONE DRINK"?

- ✓ One Drink is 1 Unit = 2/3 of a can of beer; 75 ml 14% red wine; 90 mls 12% white wine ; 25 ml (1 tot) spirits. 1 unit comes to 0.02g (0.02% BAC) in the blood, or 0.10 mg in the breath.

USEFUL INFORMATION ALCOHOL STATISTICS

1 Unit of Alcohol = 0.02% Blood Alcohol Content (*approximate value*)



**25ml TOT VODKA/
BRANDY/WHISKY/GIN**
= 0.02% BAC



25ml TEQUILA
= 0.02% BAC



75ml WINE
= 0.02% BAC

Examples of other alcoholic beverages



CIDER
2 Units =
0.04% BAC



BEER
2 Units =
0.04% BAC



COCKTAIL
2 – 4 Units =
0.04% to 0.08% BAC



QUART BEER
3.5 – 4 Units =
0.06% to 0.08% BAC



SPIRIT COOLER
1.2 – 1.9 Units =
0.02% to 0.03% BAC



SORGHUM BEER
1.5 Units =
0.03% BAC

Did you know...

- 1 Unit of alcohol is only fully absorbed into your bloodstream after 1 hour when it reaches its highest point.
- It takes approximately 1 hour for 1 Unit to be fully processed before you are sober i.e. before your Blood Alcohol Content BAC% is below the legal limit.
- If you drink 4 Units of alcohol it may take just 1 hour to get completely drunk, but a further 4 to 5 hours to sober up.
- 10 Units will take 1 to 2 hours to be absorbed into your blood but a further 10 hours for you to sober up, and add another hour to be fully sober.