

EFFECTS OF DRUGS AND ALCOHOL IN THE WORKPLACE

Alcohol is defined as any drink that contains alcohol and temporarily impairs a person's physical or mental capacity.

Evidence indicates that impairment of mental and motor functions occurs at a blood alcohol level of about 0.03% which is equivalent to the consumption of two standard drinks per hour. The effects vary depending on individual tolerance and in general women have a lower tolerance than men.

There are many workers who are professionally employed as drivers who are covered by blood alcohol restrictions. The legal blood alcohol limit for driving in SA is 0.05% which can be reached by a 70kg individual from three standard drinks in one hour. The legal limit for drivers of heavy vehicles is 0.02%.

The effects of alcohol on performance:

- Initial stimulation, euphoria.
- Loss of inhibition.
- Impairment of co-ordination, judgement, intellectual capacity and ability to act quickly.
- Blurred vision.
- Slurred speech.
- Hangover-headache, shakiness, nausea and vomiting.
- In the longer term toxic to the brain, liver, heart and stomach.

The effects of alcohol vary according to:

The amount and the way it is consumed.

Gender.

Body size, weight, state of health.

Built-up tolerance and dependence.

Combination with food or other drugs.

Alcohol is broken down by the liver at a rate of approximately 0.01 % per hour. Nothing can speed up the work of the liver - not black coffee, cold showers, exercise, vomiting or any other remedy.

Drink Driving

As a minimum, all legislative requirements associated with driving and alcohol consumption must be adhered to. It is further recommended that the consumption of alcohol prior to driving, or in between periods of driving, be avoided entirely.

Consuming alcohol, or alcohol in conjunction with other drugs, is known to increase the risk of accident. Consuming moderate amounts of alcohol can impact on skills necessary for driving.

Other Depressants

Drugs are defined as a chemical substance, regardless of whether it is legal or illegal, which may have the ability to impair a person's physical or mental capacity. These may include prescribed drugs, or non-prescribed drugs such as panadeine or cold/flu tablets and illicit drugs such as, speed, heroin, amphetamines, LSD, cocaine, ecstasy, marijuana, etc.

Sedative Hypnotics

The tranquillisers listed below are used to reduce anxiety and sleeplessness. They cause drowsiness and impair motor coordination, judgement, reaction time and intellectual capacity. The effects are greatly increased when mixed with alcohol. Although they are prescribed drugs they are often obtained illegally and misused.

Minor tranquillisers or benzodiazepines (on prescription)(valium, serepax, rohypnol)

Barbiturates (on prescription) (amylobarbitone, butobarbitone, phenobarbitone)

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Non-barbiturates (on prescription) (methaqualone, glutethimide, chloral hydrate)

Analgesics

The drugs listed below relieve pain and produce euphoria and can impair the ability to drive and operate machinery. They can cause nausea and vomiting, constipation and depress the breathing (the cause of death from overdose). Users develop both a tolerance and dependence very quickly.

Opium (illegal)
Morphine (on prescription)
Codeine (on prescription and over the counter mixed with aspirin or paracetamol)
Heroin (illegal)
Pethidine (on prescription)
Methadone (on prescription)

Non-opiate Analgesics

This group includes aspirin and paracetamol. In recommended doses this group has no effects that could affect the capacity to work safely.

Stimulants

Stimulants are drugs that elevate the mood and wakefulness but have a variety of negative side effects such as fatigue, restlessness and insomnia.

Amphetamines (illegal, or on prescription)

Known as "speed". Although amphetamines increase alertness and delay fatigue, actual performance can be impaired. In the short term unwanted effects include restlessness, palpitations, headache, tremors and sleeplessness. Longer term use can produce paranoia and hallucinations.

Cocaine (illegal)

Produces euphoria and excitement. As the dose increases can cause anxiety, confusion, rapid pulse, convulsions, nausea and vomiting. Longer term use can induce paranoid psychosis.

Caffeine (legal)

Causes increase in metabolism and body temperature and can cause headaches, insomnia, fine tremors and impatient and aggressive behaviour. High dosage (above six cups of coffee per day) can cause chronic insomnia, persistent anxiety and depression and upset stomach.

MDMA (illegal)

Known as 'ecstasy'. Effects include, an increase in blood pressure, pulse and confidence, sweating, teeth grinding, nausea, anxiety and paranoia. High doses can cause hallucinations, irrational behaviour, fits and vomiting.

Hallucinogens

Hallucinogens are capable of producing profound alteration of perception and thought processes.

Cannabis (illegal)

Known as pot, dope, marijuana, hashish. In the short term can impair motor coordination, short term memory, tracking ability and sensory functions and perception. In the longer term it may cause decreased sperm count and motility, interfere with ovulation and prenatal development and impair immune responses. (Can also be classified as a depressant).

LSD (illegal)

Known as acid. Profound alteration to perception and sensory functions.

Antihistamines

Antihistamines are prescribed or purchased over the counter as allergy or cold remedies. They can cause drowsiness and should not be mixed with alcohol.

Inhalants

Inhalants are liquid or aerosol products such as petrol, solvents or glues. These are sometimes used by individuals to get "high" or can be inhaled inadvertently at work. The effects include drowsiness, disorientation, anxiety and tension, nausea and vomiting, sensitivity to sunlight, eye irritation and double vision. Inhalants can cause death from arrhythmia (irregular heart beat) or suffocation.

Pesticides

Organophosphate Pesticides

These chemicals can produce effects similar to tranquilisers. Effects include, drowsiness, slowed reaction time, headache, giddiness, confusion, ataxia, slurred speech and convulsions. Can also produce flu' like symptoms and impairment of vision. When mixed with alcohol the effects are increased.

Organochlorine Pesticides

In high doses these chemicals have a stimulant effect, producing poor coordination and excitability. Over exposure can cause violent convulsions, coma and death.

Solvents

Solvents are used to dilute solid chemicals and for cleaning. Solvents act as depressants. Effects include slowed reaction time, poor coordination, dizziness, headache, nausea, tiredness and in higher doses confusion and reduction of muscle strength (peripheral neuropathy). The effects can be compounded if an individual is exposed to a mixture of solvents. The adverse effects may be increased if mixed with alcohol.

Solvents include:

Hexane

Toluene

Methylene chloride

Methyl ethyl ketone (MEK).