THE MAURITIUS TURF CLUB

PORT - LOUIS  MAURITIUS

CHAMP DE MARS

RIDER BANNED SUBSTANCES GUIDELINES - 2019

This document serves as a medication guideline to riders and their health care providers.

The banned substances that are of concern to the rider differ from those in other sports where the emphasis is on performance enhancement. The screening of riders involves only urine samples and the main focus is on substances that may impair the judgment of the rider on the track and in this way compromise the safety of both riders and horses.

Banned substances fall into two broad categories namely recreational drugs and therapeutic substances. Recreational drugs are known to cause mood changes, dissociative behaviour and to have mind altering effects. Therapeutic substances form part of "over the counter" preparations and prescribed medication. Many of these substances have effects similar to that of alcohol such as loss of balance, unsteady gait, slurred speech and poor concentration and are thus detrimental to the judgment and performance of the rider. It is for this reason, in the interest of all the riders in the field, that these substances are monitored.

The monitoring of banned substances is standard practice in many first world countries. The list of substances and their concentrations screened for are similar to those that apply to aircraft pilots, operators of heavy equipment and drivers of public transport vehicles. There are formal published threshold concentrations for some of these substances and a positive is called when this threshold is exceeded.
For permitted compounds there are internationally accepted levels at which substances are considered to have no detrimental influence. This level is taken into consideration during screening and a positive is only called when the level is exceeded.

Substances of concern change over time as new preparations become available, the rules of The Mauritius Turf Club will be amended accordingly.

DEFINITIONS OF BANNED SUBSTANCES

A BANNED SUBSTANCE is any one or any combination of the following substances or any of the metabolites of such a substance or a combination of substances or any isomer of a substance or any isomer of a metabolite:

Alcohol – at or above a threshold of:- The concentration of alcohol in a blood specimen should not be more than 20 milligrams per 100 millilitres and the concentration of alcohol in a specimen of breath should not be more 10 micrograms per 100 millilitres;
Cannabinoids: a concentration in urine of 11-nor-delta 9 tetrahydrocannabinol-9-carboxylic acid (carboxy-THC) greater than 15 nanograms per millilitre;

Amphetamines excluding ephedrine, methylephedrine, pseudoephedrine and phenylpropanolamine;
Barbiturates;
Lysergic Acid Diethylamide (LSD);
Dissociative Anaesthetics including Phencyclidine (PCP);
Cocaine;
Opiates, Opiods and related substances including codeine save only that in the case of codeine, its presence in a specimen of urine at a concentration of less than 2000 nanograms per millilitre shall not constitute an offence;
Benzodiazepines;
Benzodiazepine-like substances;
Diuretics including Furosemide (Lasix);
Gamma hydroxybutyric acid (GHB).

*Preparations which contain **any** Recreational Drugs are Banned*

The above list includes many recreational drugs which are known to be potentially habit forming due to their addictive properties. The levels are controlled by international consensus and norms. These recreational drugs are discussed below.

Amphetamines

Compounds screened for include Amphetamine (speed, uppers, hearts, bennies, black beauties, truck drivers etc.), Methamphetamine (meth, tik, ice, crystal, go fast, speed, chalk, glass etc.), Methcathinone (KAT), MDA, MDMA (Ecstasy, XTC, X, clarity, Adam, peace, hug, beans, love drug etc.) Some pharmaceutical products are related to amphetamines in structure but do not have the same mind-altering potency. These form part of common medications due to their beneficial effects and are thus excluded from screening. Substances which are currently excluded from screening include normal dosage of Ephedrine (cough syrups, decongestants and appetite suppressants), Methylephedrine, Pseudoephedrine (decongestant, stimulant) and Phenylpropanolamine decongestant, appetite suppressant, anorectic).

Lysergic Acid Diethylamide (LSD)
LSD (acid, blotter, dots, cubes, microdot, yellow sunshine, blue heaven) is most often taken as tablets. This is a psychedelic drug, reported to alter reasoning and thinking processes.

Gamma hydroxybutyric acid (GHB)
Gamma hydroxybutyric acid (home boy, grievous bodily harm, soap, G, liquid ecstasy, scoop, goop, liquid X) is a central nervous system depressant. It is normally sold and abused as a clear, odourless, nearly tasteless liquid. It is a well-known recreational drug with effects similar to alcohol and ecstasy. At high doses it may induce dizziness, drowsiness, agitation, visual disturbances and amnesia.

Cathinones are 'cousins' of the amphetamine family of drugs, which includes amphetamine itself (speed) and MDMA (ecstasy), and which have similar effects. **Cathinones** are the family of related chemicals, including **cathinone** and many synthetically produced chemicals, like mephedrone, methylone (M1) and MDPV. Cathinone is a monoamine alkaloid found in the shrub Catha edulis and is chemically similar to ephedrine, cathine, methcathinone and other amphetamines. Cathinone differs from many other amphetamines in that it has a ketone functional group. The **effects** can include agitation, paranoia, hallucinations, chest pain, increased pulse, high blood pressure, and suicidal thinking/behaviour. **Khat** is a leafy green plant containing two main stimulant **drugs** which

speed up your mind and body. Their main effects are **similar to**, but less powerful than, amphetamine (speed). **Khat** is used mostly in North East Africa, and the Arabian Peninsula and by expatriate communities from these regions.

Dissociative Anesthetics

These are pharmaceutical substances used to induce anaesthesia but are also used as recreational drugs. They are known to cause dissociative behaviour, hallucinations and euphoric effects which could lead to convulsions. Locally available pharmaceutical substances include Ketamine (jet, Vitamin K, Special K etc), Tiletamine and Phencycline (PCP, angel dust, ozone, boat, love boat, hog, peace pill, wack, rocket fuel etc.). Phencyclidine can be smoked, snorted or simply ingested. It is classed as a dissociative drug with aesthetic, hallucinogenic and euphoric effects which could lead to convulsions. Behavioural effects, when under the influence of these substances, are not unlike those of alcohol.

Cocaine (crack, coca tea, coke, snow, flake, blow, C, candy, charlie etc.) Cocaine is a stimulant of the central nervous system and highly addictive. It can be smoked, inhaled (snorted) or injected. It can cause feelings of well-being and euphoria. Anxiety, paranoia, restlessness, tremors and convulsions are also commonly observed.

Cocaine is metabolized to Benzoylecgonine. Benzoylecgonine is prosecuted similarly to cocaine as it is a highly specific metabolic indicator of cocaine use.

Opiates, Opioids and related substances

Opiates are substances, related in structure and effects to Morphine and Codeine and are found in opium, a product of the opium poppy. Opioids and related substances are compounds that have opium or morphine-like action and effects. Opiate, Opioids and related substances induce a rush of intense euphoria accompanied with relaxation, drowsiness, sleepiness and relief from fear and anxiety. These impair mental and physical performance. Recreational drugs within the Opiate class include Morphine, Opium (big O, black stuff, block, gum, hop) and Heroin (smack, H, ska, junk, white horse, horse, brown sugar etc.) that are also the most addictive. Also banned are substances derived from Morphine with the same side effects including the potent analgesics Hydromorphone, Oxycodone (with the recreational abused street names oxy, cotton, 40, 80) and Hydrocodone.

Opiates are very effective for the treatment of severe pain and therefore form part of many pharmaceutical preparations.

Some of these highly controlled and scheduled substances are only really used and available in hospitals such as Pethidine (Meperidine) and Fentanyl. Others form part of readily available prescription medications and are currently allowed at normal therapeutic dosage including Dextromethorphan, Dihydrocodeine, Ethylmorphine, Pholcodine and Propoxyphene.

Codeine is similarly found in many readily available medicinal preparations for the treatment of mild to moderate pain. Codeine is however metabolized to Morphine, a potent analgesic which is also well known to impair mental and physical performance.

Within the current rules for riders Codeine is banned in urine at a concentration greater than 2000 nanograms per millilitre.

Codeine is not considered a significant recreational drug but the addictive properties are well-known. The following statement is a guideline to ensure that, since Codeine metabolizes to Morphine, the resulting concentrations of Codeine and Morphine from a Codeine dose, do not exceed the permitted levels.

"Do not use Codeine containing preparations one full day before the day of the race. This withdrawal time considers a normal and single dose of such a preparation. Where this dosage is exceeded the withdrawal period must be increased."
When this guideline is followed the Codeine concentration will not exceed the 2000 ng/ml threshold which is in place.

Cannabinoids - a concentration of 11-nor-delta-9-tetrahydrocannabinol-9-carboxylic acid (Carboxy-THC) in urine may not exceed 15 nanograms per millilitre. Cannabis (also known as marijuana, dagga, boom, hemp, hash, dope, grass, joint, pot, ganga, weed, herb etc.) describes preparations of the Cannabis plant.

The plant contains many cannabinoid substances which have psychoactive, hallucinogenic and relaxation effects. These can lead to irrational behaviour, disorientation and paranoia.

When cannabis is used Carboxy-THC is one of the most significant and widely recognized indicators of cannabis use in urine. As indicated above there is a specific threshold level for Carboxy-THC within the rules. Carboxy-THC is stored in the body fat of regular users and can take six to ten weeks to be completely cleared from the body. During this time, it may be detected in a urine sample resulting in a positive finding.

Synthetic cannabinoids and new drugs
It is important to be aware that new recreational drugs are emerging worldwide. These include synthetic cannabinoids which, as the drug class name suggests, have the same effects as cannabis, but include a much larger range of substances. Be especially aware that these products may expose the user to banned substances. These are sold as packets of what appear to be herbs and are indicated as "herbal products" or "exotic incense blends" or even "bath salts".

Preparations which contain Therapeutic Drugs that are Banned
Therapeutic substances that have mind altering effects are frequently central nervous system depressants and require a doctor's prescription. They are most often prescribed for anxiety and sleep disorders and act as potent sedatives reducing alertness and resulting in drowsiness and sleepiness. These may also cause mind altering effects and euphoria which lead to dissociative behaviour. Many have addictive properties and all can be abused at high concentrations and have been reported to provide the sensation of "being separate from your body and the environment".

Barbiturates
Barbiturates are central nervous system depressants that produce a spectrum of effects from mild sedation to hypnotic effects and total anesthesia. They are frequently used for the treatment of anxiety, insomnia and seizures. Phenobarbitone is locally available and others examples include Amobarbital and Secobarbital.

Benzodiazepines
These compounds have the benzodiazepine structure and are classified as depressants with hypnotic effects. The therapeutic uses include the induction of sedation and sleep, relieving anxiety and muscle spasm and to prevent seizures. Even at low doses the effect of sedation (sleepiness) is

significant. Locally available benzodiazepines include Diazepam, Bromazepam, Oxazepam, Midazolam, Loprazolam, Flunitrazepam, Triazolam, Brotizolam, Lormetazepam, Flunitrazepam, Nitrazepam, Clobazam, Alprazolam, Lorazepam, Prazepam and Temazepam. The street names for abused Flunitrazepam include roofinol, roofies, Roche, R2, rope and rophies.

Benzodiazepine-like substances
These substances do not have the benzodiazepine structure but exert the same effect as the Benzodiazepines. Examples include Zopiclone and Zolpidem, both well-known sleeping tablets prescribed for insomnia treatment.

Diuretics including Furosemide
Diuretics cause increased water loss through urination and may lead to dehydration. Dehydration of the rider is dangerous on the track (resulting in confusion and poor judgment) and is detrimental to the health of the rider (kidney damage can occur).
Well known diuretic substances include Furosemide, Amiloride, Spironolactone, Indapamide and Hydrochlorothiazide.

Be aware that many anti-hypertension (high blood pressure) medications contain diuretics such as Hydrochlorothiazide and Indapamide. Examples of such anti-hypertension medications include Bisozyd, Servatrub, Acesyl Co, Adco-Quinaretic, Adco-Zetomax Co, Airprel Plus, Ciplasyl Plus 4, Co-Renitec, Coversyl Plus, Enap-Co, Hexal-Lisinopril Co, Inhibace Plus, Kwinco, Lisinopril Co Unicorn, Lisozide, Lisoretic, Pharmapress Co, Perindopril Co Unicorn, Pearinda Plus 4, Preterax, Prexum Plus, Spec Perindopril Plus, Tritace Plus, Vectoryl Plus, Zestoretic, Zapato-Co, Atacand Plus, Co Exforge, Co-Diovan, Co-Irbewin, Co-Micardis, Co-Pritor, Co-Tareg, Co-Zomevek, Coaprovel, Cozaar Comp, Dynaval Co, Hytenza, Losaar Plus, Losartan Co Unicorn, Lozaan, Mylacand, Netrasol Co, Zartan.

Codeine containing preparations
Codeine is an analgesic and is used in many medicinal preparations for the treatment of mild to moderate pain. This includes headache tablets (often in combination with Paracetamol) and analgesics, expectorant and decongestant preparations that may be in the form of capsules, tablets or syrups.

Codeine is banned at a concentration in urine greater than 2000 nanograms per millilitre. Codeine is metabolized to Morphine, therefore to ensure that the use of such preparations does not result in a Codeine and Morphine level exceeding the permitted concentrations thereof, there is the following Guideline:
Do not use Codeine containing preparations one full day before the day of the race. This withdrawal time considers a normal and single dose of such a preparation. Where this dosage is exceeded the withdrawal period must be increased."

When this guideline is followed the Codeine concentration will not exceed the above threshold.

Codeine containing preparations
Examples of locally registered preparations containing Codeine are listed below.

<u>It is best if these preparations are not used at all and alternative medications are selected:</u>

Actifed Dry Cough Regular Acurate	Empacod Expectalin Flusin Junior	Napacod Nurofen Plus Painagon	Tensodol Tensolve Tensopyn

Adco Salterpyn Adco-Dol Adco-Sinal Adco-Tussend Antipyn Ban Pain Benylin Betapyn Broncleer Brunacod Co-codamol Codomil Codoxol Cofendyl Coughcod Senior Dentopain Forte Dequa-coff Doc-sed	Flutex Cough Linctus Gen-Payne Go-Pain Ibucod Ibupain Ilvico Infapain Lenadol Lenapain Lenazine Lennon Codeine Phosphate Lentogesic Linctifed Wet Cough Regular Metaxol Mybucod Mybulen Myprodol	Painamol Plus Parafizz Co Phensedyl Propain Pynmed Pynstop Sinumax Co Sinustop with Codeine Sinutab Tablets with Codeine Spectrapain Spectrapain Forte Stilpane Stopayne Suncodin Synaleve Syndol	Tenston Tenston SA Trifen Tussilinct Linctus Tussitot

Alternative pain medications which do not contain codeine or other banned substances

Riders who are currently using preparations containing codeine for sporadic, acute, chronic pain or fever should be aware that there are many alternative, potent medications to treat such pain.

Many of these medications are available from the pharmacist as over-the-counter analgesic and anti-inflammatory preparations. These and other more potent pain medications can also be prescribed by a medical practitioner upon request.

Pharmacists and medical practitioners have the required knowledge to assist with the best selection of drugs to use for a particular condition (while considering and providing warning of possible side effects).

Examples of drugs which are NOT banned:

Celecoxib
Etoricoxib
Ibuprofen Indomethacin
Ketorolac
Ketoprofen
Lornoxicam
Mefenamic acid
Meloxicam
Naproxen
Paracetamol
Piroxicam

Muscle relaxants for muscle spasm which do NOT contain a banned substance
Muscle relaxant preparations can be obtained from a medical practitioner by prescription and sometimes over the counter at pharmacies. Examples of such pharmaceuticals are listed below:

Methocarbamol
Baclofen
Cyclobenzaprine

PLEASE NOTE:
Riders seeking relief from acute, chronic or inflammatory pain must consult medication package inserts carefully as many preparations are combined with Codeine or other banned substances and this is not declared on the front of the box.

Check the ingredients on the label even if the product has been used before. The manufacturers may have changed the ingredients.
Products with similar names may contain different ingredients meant for different purposes, check the medication insert.
Should use be made of any medication not listed in this document, ascertain prior to use whether the product contains any banned substances.