

DIAGNOSTICS

DiagnosticsUpdate.com

Issue No: 29

Second Quarter 2022



DIAGNOSING HEART CONDITIONS



COVID-19 PCR TESTING

NOW AVAILABLE IN GABORONE
DIAGNOFIRM MEDICAL LABORATORIES

AVAILABLE AT

Walk-In Testing

Available at Covid Testing
Area at Diagnofirm Main Branch
Plot 12583, Nyerere Drive,
Middlestar, Gaborone

- Gaborone
- Maun
- Phikwe
- Francistown
- Kazangula
- Palapye

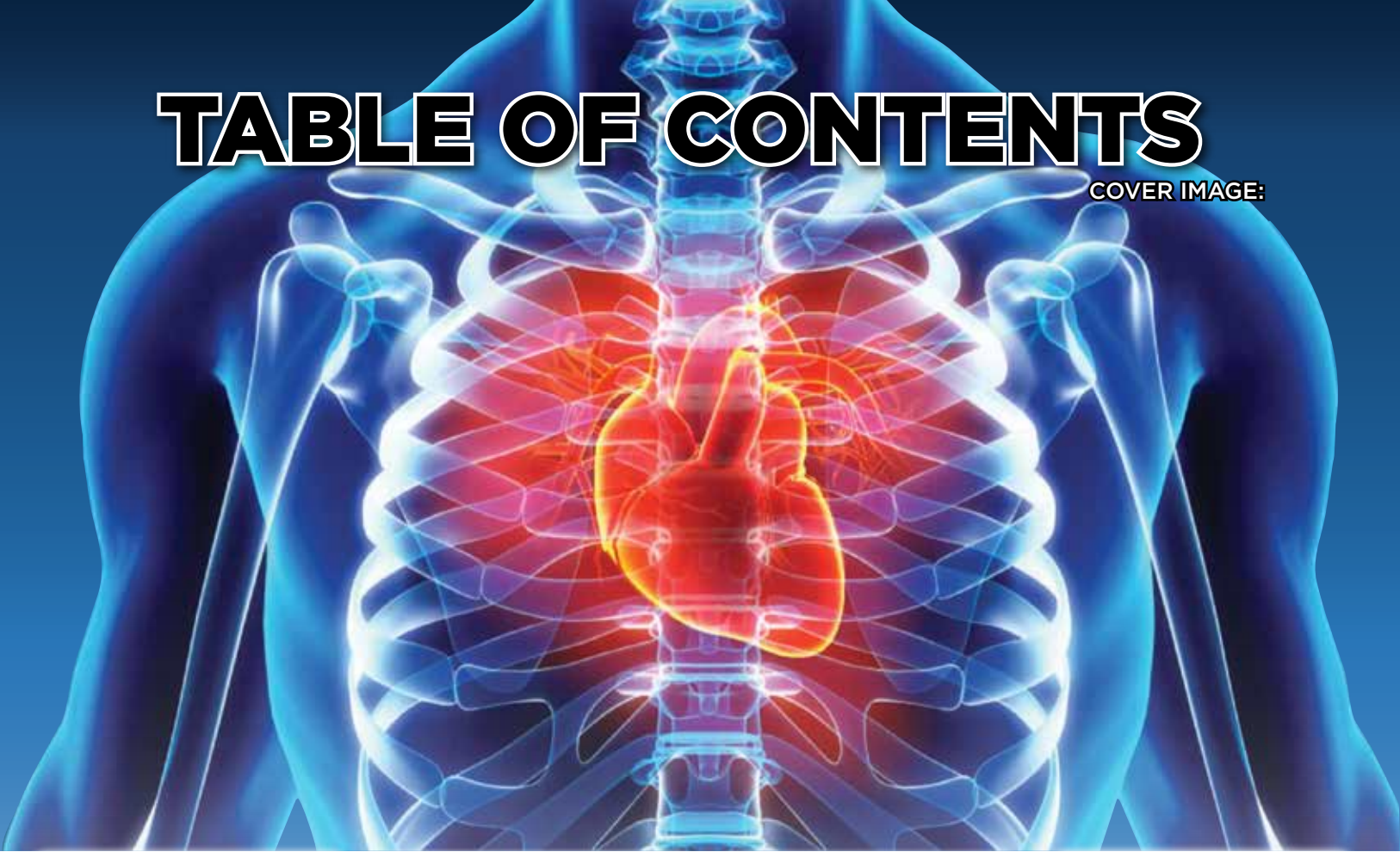
For more details, contact us on:
373 2958 / 77 583 859



DIAGNOFIRM
MEDICAL LABORATORIES
PATHOLOGY YOU CAN TRUST

TABLE OF CONTENTS

COVER IMAGE:



DIAGNOSING HEART CONDITIONS

04

CHRONIC KIDNEY DISEASE

06

DRUG USE SCREENING:

What are drug use screening tests?

08

EFFECTS OF DRUG ABUSE:

Drug misuse, abuse, and addiction can all lead to both short-term and long-term health effects.

12

Diagnostics Update.com

Private Bag 283, Gaborone
Tel: 395-0007, Fax: 395-7980
www.diagnostics-update.com
Email: ddiagnostics@yahoo.com

Advertising Sales & Copyrighting Editor

Mothusi Jowawa

Editor:

Mothusi Jowawa

72482503 / 73584988 / 72199228

Dear Reader

One of the great aspects of this job is having the opportunity to talk with and listen to the many different manufacturers, distributors, and of course the huge network of dealers that is the backbone of our industry.

Years ago I never would have ever imagined I would be in this position, and it is amazing. To say I really enjoy this job is an understatement.

What makes Diagnostics Update.com so unique is their informative and educative ways to the nation.

The staff and management is always looking for ways to inform their readers on how to tackle different medical issues. Basically, you want more people to enjoy reading more and more.

That said, there is still the need to get more readers to embrace healthy routines within and outside the homestead.

Copyright © 2017 by the Diagnostics Update.com, except as noted.

Some materials were condensed from various sources, specifically online sources, where copyright stays with the original owner.

Diagnostics Update.com and all the entities associated with them accept no liability, under any circumstance,

for anything whatsoever arising out of the information presented in this publication. All opinions expressed are those of the authors and not of Diagnostics Update.com.

All materials in Diagnostics Update.com are for informational purposes only and are not a substitute for professional medical or health

advice, examination, diagnosis, or treatment. Always seek the advice of your physician or other qualified health professional before starting any new treatment, making any changes to existing treatment, or altering in any way your current exercise or diet regimen. The information here should not be used

to diagnose, treat, cure, or prevent any disease without the supervision of a medical doctor. Please be advised that medical information changes rapidly and new discoveries are being made on a daily basis. Therefore, some information in this publication may have change by the time you read it.

The only laboratory in Botswana accredited with SADCAS ISO 15189:2012 for SARS-CoV-2(Covid-19)



Operating Hours

Mon - Fri: 0700 - 1800hrs
Sat: 0800 - 1500hrs
Sun: 0800 - 1300hrs

COVID-19 PCR TESTING
NOW AVAILABLE AT DIAGNOFIRM



DIAGNOFIRM
MEDICAL LABORATORIES
PATHOLOGY YOU CAN TRUST

SADCAS ACCREDITS FIRST MEDICAL LABORATORY FOR COVID 19 DIAGNOSTIC TESTING

SADCAS is proud to announce the accreditation of its very first medical laboratory for conducting Coronavirus disease 2019 (COVID-19) diagnostic testing.

Diagnofirm Medical Laboratories Gaborone situated at Plot Number 12583, Nyerere Drive, Middlestar, Gaborone, Botswana has been accredited to ISO 15189:2012 for SARS-CoV-2/COVID-19 testing using the PCR/Bioer Extraction and Amplification System. The accreditation is a scope extension in the "Molecular Biology" scope. Diagnofirm was first accredited by SADCAS on 25 June 2015 to ISO 15189: 2012 and granted the accreditation number MED 012 for the following scopes: Chemistry; Endocrinology; Haematology; Microbiology; Molecular Biology; and Serology.

Diagnofirm Medical Laboratories Gaborone was re-assessed and renewal of accreditation was granted on 31 July 2020.

For COVID-19 Testing, Diagnofirm Medical Laboratories Gaborone underwent a scope extension assessment on 8 December 2020 by a team of two including Technical Assessor competent in the scope molecular biology. The assessment which was conducted virtually involved a vertical assessment and witnessing the scientist undertaking the test. No findings were raised during the assessment after which a decision to accredit in the test method "SARS-CoV-2/COVID-19" using the PCR Bioer Extraction and Amplification System was made by the SADCAS Accreditation Approvals Committee on 11 December 2020 based on the assessment team's recommendation.

The COVID-19 pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is now a major public health problem globally. Medical laboratories play a critical role in the healthcare delivery system by providing information for patient management, public health, disease control and surveillance. Reliable results of medical laboratories conducting tests to detect the SARS-CoV-2 virus are essential in the management of the pandemic. Accurate and early detection of SARS-CoV-2 in infected people are key in limiting transmission of COVID-19 and informing interventional measures.

Accreditation to ISO 15189:2012 is a vital tool for laboratories to improve quality performance, efficiency and reliability. The SADCAS. *Source: www.sadcas.org*

DIAGNOSING HEART CONDITIONS

TESTS FOR DIAGNOSING HEART CONDITIONS

To identify common heart conditions you'll need to have some tests. These could include:

- blood pressure tests
- checking your pulse
- X-rays
- stress tests

CHECKING YOUR PULSE

Taking a pulse is a very important part of heart health checks. It measures the number of heart beats per minute, assesses if the pulse is regular or not, and identifies the strength of the pulse. Your nurse or doctor may check your pulse, or you can check it yourself.

BLOOD PRESSURE

Blood pressure is an important measurement that can be taken by your doctor, nurse or healthcare assistant. It's recorded as two readings:

systolic pressure (higher reading) – this records the pressure within the blood vessels as the heart contracts and forces blood out into the arteries
 diastolic pressure (lower reading) – this records the pressure when the heart fills up with blood again
 Your blood pressure fluctuates throughout the day, depending on what you're doing. The "white coat effect" is when your blood pressure rises at the thought of having your blood pressure taken. To prevent this when you get your BP taken, try to relax. You might be asked to sit quietly for at least five minutes beforehand. Tell

the person taking your blood pressure about any prescribed medicines you're taking.

Sometimes your doctor may want you to monitor your blood pressure at home over a period of time. This can be either by 24-hour ambulatory monitoring or by home monitoring.

ECHOCARDIOGRAM

An echocardiogram - or "echo" - is an ultrasound scan of the heart. It uses high frequency sound waves to create an image of your heart.

This is a painless procedure that is usually performed in hospital or in an outpatient clinic. You'll have jelly applied to your bare chest, and an experienced operator will move the probe around your chest to get good views of your heart.

It can check:

- the size of the heart
- how well the heart muscle is contracting and relaxing
- how well the valves are working

An electrocardiogram (ECG) is a test that records the electrical activity of the heart. The ECG reflects what's happening in different areas of the heart and helps identify any problems with the rhythm or rate of your heart. The ECG is painless and takes around 5-10 minutes to perform.

24-HOUR OR AMBULATORY ELECTROCARDIOGRAM

In this test, electrodes are connected to a small box and attached to a belt. You wear this belt for 24 hours, as you go about your normal daily



A PHYSICAL EXAM



ECHOCARDIOGRAM



BLOOD TEST



EXERCISE STRESS TEST



CARDIC CATHETERIZATION



AN ELECTROCARDIOGRAM

activities. The ECG will be monitoring and will be able to record any abnormalities over the day. You'll also be asked to record any symptoms. Then this can be assessed by the electrophysiologist or cardiologist.

STRESS TEST

This stress test - or exercise tolerance test (ETT) or treadmill test - is similar to an ECG but records the activity of the heart as it works harder, for example while you're walking on a treadmill. This "exercise" ECG records how the heart responds to exercise.

TILT TEST

A tilt test allows the doctor to monitor your blood pressure and heart rate when you're lying down and standing up.

This test is designed to assess symptoms you may have been experiencing, like light-

headedness or dizziness, and to see if your symptoms are related to your blood pressure or heart rate.

The test will normally be done as an outpatient appointment in an electrophysiology department.

MAGNETIC RESONANCE IMAGING (MRI)

This painless scan uses a magnetic field inside a scanning machine to produce images of the heart and blood vessels.

It's useful for checking problems with structure of heart and blood supply.

It's very helpful in getting images from people whose vessels and heart anatomy are difficult to see using angiography.

TO PAGE 09

SKIN CANCER: THE IMPORTANCE OF BEING PROACTIVE

IS THIS SPOT OR RASH SKIN CANCER?

Skin rashes are a common condition. They usually stem from something harmless, like a reaction to heat, medication, a plant like poison ivy, or a new detergent you've touched.

Rashes can show up on any part of your body, from your head to your feet. They can even hide in the cracks and crevices of your skin. Sometimes they itch, crust, or bleed.

CAN RASHES BE A SIGN OF CANCER?

Occasionally, bumps or redness on your skin can be a sign of cancer.

For example, if you notice an itchy mole on your chest that seems

to be changing shape, there's a chance you're dealing with skin cancer.

Because cancer can be very serious — even life threatening — it's important to know the difference between a rash caused by irritation and one caused by skin cancer.

This is why it's important to talk with a dermatologist about any rash or growth that's new, changing, or not going away.

DOES SKIN CANCER ITCH?

While skin cancers are often asymptomatic, meaning they don't show symptoms, they can be itchy.

For instance, basal cell skin cancer can appear

as a raised reddish patch that itches, and melanoma can take the form of itchy dark spots or moles.

Talk with your doctor about any itchy, crusty, scabbed, or bleeding sore that's not healing.

SYMPTOMS OF SKIN CANCER

The most common symptom Trusted Source of skin cancer is a change in your skin, such as a:

- **new growth**
- **sore that's not healing**
- **mole that's changing color or shape**

Melanoma is a less common but more dangerous form of skin cancer because it can spread easily if not treated. One of the best ways to get a handle on its symptoms is to think of "A-B-C-D-E."

"A" for asymmetrical. Do you have a mole or spot that seems to be shaped oddly or have two sides that look different?

"B" for border. Is the border of your mole or spot jagged?

"C" for color. Is the color of your mole or spot uneven or different?

"D" for diameter. Is your mole or spot bigger than the size of a pencil eraser?

"E" for evolving. Have you noticed your mole or spot changing in an obvious way?

If any of these apply to a mark on your skin, it's important to talk with a dermatologist as soon as possible.

Types of rashes and spots

MYCOSIS FUNGOIDES

Mycosis fungoides is the most common form of cutaneous T cell lymphoma, a type of blood cancer that involves infection-fighting white blood cells called T cells.



When these cells turn cancerous, they form a red, scaly rash on the skin. The rash can change over time,

and it may: **itch • peel • hurt** Mycosis fungoides often shows up as an eczema-like rash in areas that typically get little sun exposure.

ACTINIC KERATOSIS

Actinic keratoses are crusty or scaly pink, red, or discolored bumps that appear on areas of sun-exposed skin, including the **face • scalp • shoulders • neck** backs of your arms and hands. If you have several of them together, they can resemble a rash. They're caused by damage from the sun's ultraviolet (UV) radiation. If you don't get actinic



keratosis treated, it can turn into skin cancer. Treatments include:

- cryosurgery (freezing them off)
- laser surgery
- scraping off the bumps

ACTINIC CHEILITIS

Actinic cheilitis looks like scaly bumps and sores on your lower lip. Your lip might also be swollen and red.

It's caused by long-term sun exposure, which is why it often affects people with lighter skin who live in sunny climates or individuals who spend a lot of time working outside.



squamous cell cancer if you don't have the bumps removed.

Actinic cheilitis can turn into

CUTANEOUS HORNS

Just as the name suggests, cutaneous horns are hard growths on the skin that look like an animal's horns. They're made from keratin, the protein that forms skin, hair, and nails.



The horns are concerning because about half the time they grow out of precancerous or cancerous skin sores. Larger, painful

horns are more likely to be cancerous.

You'll usually just have one cutaneous horn, but they can sometimes grow in clusters.

MOLES (NEVI)

Moles, also called nevi, are flat or raised areas of skin. They're usually brown or black, but they can also be: **tan • pink • red • skin-colored.** Moles are individual growths, but most adults have between 10 and 40 of them, and they can appear close together on the skin.



some cases, melanoma — the most serious type of skin cancer — can begin within a mole.

Moles are often benign, but in

SEBORRHEIC KERATOSIS

These brown, white, or black bumpy growths form on parts of your body, like your: **• stomach • chest • back • face • neck.** They can be tiny or can measure more than an inch across. Although seborrheic keratosis sometimes looks like skin cancer, it's actually harmless.

However, because these growths can get irritated when



they rub against your clothes or jewelry, you may choose to have them removed.

BASAL CELL CARCINOMA

Basal cell carcinoma is a type of skin cancer that appears as red, pink, or shiny growths on the skin, but it can also appear as dark or gray-colored lesions, especially on individuals with darker skin tones.



Like other skin cancers, it's caused by prolonged exposure to the sun.

While basal cell carcinoma rarely spreads, it can leave permanent scars on your skin if you don't treat it.

MERKEL CELL CARCINOMA

This rare skin cancer looks like a reddish, purple, or blue-colored bump that grows quickly. It can look like:

- **a cyst**
- **an insect bite**
- **a sore**
- **a pimple**



You'll often see it on your: **• face • head • neck**

It's more common in people with lighter skin who have

had lots of sun exposure, although the exact cause is still not known.

BASAL CELL NEVUS SYNDROME

This rare inherited condition, which is also known as Gorlin syndrome, increases your risk of developing basal cell cancer as well as other types of tumors.

The disease can cause clusters of basal cell carcinoma, especially on areas



like your:

• face • chest • back

CHRONIC KIDNEY DISEASE

WHAT IS KIDNEY DISEASE?

Chronic kidney disease, also called chronic kidney failure, involves a gradual loss of kidney function. Your kidneys filter wastes and excess fluids from your blood, which are then removed in your urine. Advanced chronic kidney disease can cause dangerous levels of fluid, electrolytes and wastes to build up in your body.

In the early stages of chronic kidney disease, you might have few signs or symptoms. You might not realize that you have kidney disease until the condition is advanced.

Treatment for chronic kidney disease focuses on slowing the progression of kidney damage, usually by controlling the cause. But, even controlling the cause might not keep kidney damage from progressing. Chronic kidney disease can progress to end-stage kidney failure, which is fatal without artificial filtering (dialysis) or a kidney transplant.

SYMPTOMS

Signs and symptoms of chronic kidney disease develop over time if kidney damage progresses slowly. Loss of kidney function can cause a buildup of fluid or body waste or electrolyte problems. Depending on how severe it is, loss of kidney function can cause:

- Nausea
- Vomiting
- Loss of appetite
- Fatigue and weakness
- Sleep problems
- Urinating more or less
- Decreased mental sharpness
- Muscle cramps
- Swelling of feet and ankles

- Dry, itchy skin
- High blood pressure (hypertension) that's difficult to control
- Shortness of breath, if fluid builds up in the lungs
- Chest pain, if fluid builds up around the lining of the heart

Signs and symptoms of kidney disease are often nonspecific. This means they can also be caused by other illnesses. Because your kidneys are able to make up for lost function, you might not develop signs and symptoms until irreversible damage has occurred.

WHEN TO SEE A DOCTOR

Make an appointment with your doctor if you have signs or symptoms of kidney disease. Early detection might help prevent kidney disease from progressing to kidney failure.

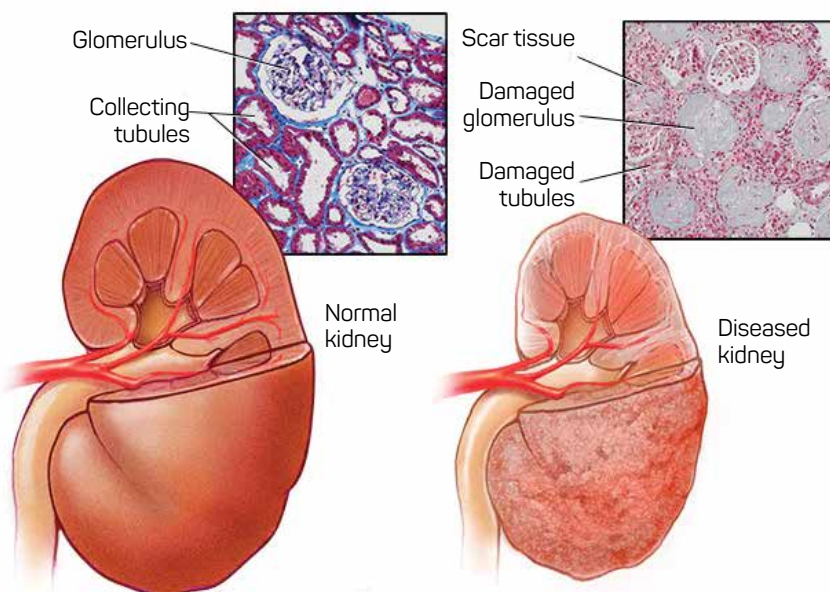
If you have a medical condition that increases your risk of kidney disease, your doctor may monitor your blood pressure and kidney function with urine and blood tests during office visits.

CAUSES

Chronic kidney disease occurs when a disease or condition impairs kidney function, causing kidney damage to worsen over several months or years.

Diseases and conditions that cause chronic kidney disease include:

- Type 1 or type 2 diabetes
- High blood pressure
- Glomerulonephritis (gloe-mer-u-low-nuh-FRY-tis), an inflammation of the kidney's filtering units (glomeruli)
- Interstitial nephritis (in-tur-STISH-ul nuh-FRY-tis), an inflammation



Healthy kidney vs. diseased kidney
A typical kidney has about 1 million filtering units. Each unit, called a glomerulus, connects to a tubule, which collects urine. Conditions such as high blood pressure and diabetes take a toll on kidney function by damaging these filtering units and collecting tubules and causing scarring.

- of the kidney's tubules and surrounding structures
- Polycystic kidney disease or other inherited kidney diseases
- Prolonged obstruction of the urinary tract, from conditions such as enlarged prostate, kidney stones and some cancers
- Vesicoureteral (ves-ih-koe-yoo-REE-tur-ul) reflux, a condition that causes urine to back up into your kidneys
- Recurrent kidney infection, also called pyelonephritis (pie-uh-low-nuh-FRY-tis)

RISK FACTORS

Factors that can increase your risk of chronic kidney disease include:

- Diabetes
- High blood pressure
- Heart (cardiovascular) disease
- Smoking
- Obesity
- Being Black, Native American or Asian American
- Family history of kidney disease
- Abnormal kidney structure
- Older age
- Frequent use of medications that can damage the kidneys

COMPLICATIONS

Chronic kidney disease can affect almost every part of your body. Potential complications include:

- Fluid retention, which could lead to swelling in your arms and legs, high blood pressure, or fluid in your lungs (pulmonary edema)
- A sudden rise in potassium levels in your blood (hyperkalemia), which could impair your heart's function and can be life-threatening
- Anemia
- Heart disease
- Weak bones and an increased risk of bone fractures
- Decreased sex drive, erectile dysfunction or reduced fertility
- Damage to your central nervous system, which can cause difficulty concentrating, personality changes or seizures
- Decreased immune response, which makes you more vulnerable to infection
- Pericarditis, an inflammation of the saclike membrane that envelops your heart (pericardium)
- Pregnancy complications that

TO PAGE 08



DIAGNOFIRM
MEDICAL LABORATORIES
PATHOLOGY YOU CAN TRUST

Botswana's First ISO Accredited Medical Laboratory

We offer Exhaustive Pathology Tests which includes:

- Kidney Function Tests
- Heart Disease Tests
- Drugs Of Abuse Tests
- Genetoc Doisease Tests
- Autoimmunity Tests
- Gastrointestinal Infectious Tests
- Liver Function Tests
- Diabetes Tests
- Fat Metabolism Tests
- Cancer Markers
- Infectious Disease Tests
- Urinary Tract Infectious Tests
- Therapeutic Drug Monitoring Tests
- Food Handlers Tests
- Biopsies
- Hormones
- Pap Smear
- Allergy Tests
- Fertility Tests
- DNA Tests



ISO 15189:2012

TEL: 395 0007 • Email: lab@diagnofirm.co.bw
Plot 12583, Nyerere Drive, MiddleStar 000, Gaborone,



CHRONIC KIDNEY DISEASE

FROM PAGE 06

carry risks for the

time could lead to kidney damage.

mother and the developing fetus

- Irreversible damage to your kidneys (end-stage kidney disease), eventually requiring either dialysis or a kidney transplant for survival.

PREVENTION

To reduce your risk of developing kidney disease:

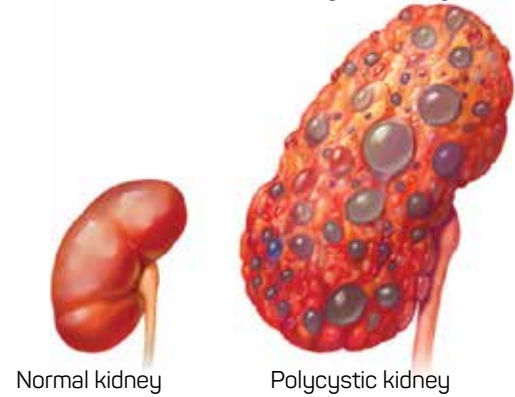
- **Follow instructions on over-the-counter medications:** When using nonprescription pain relievers, such as aspirin, ibuprofen (Advil, Motrin IB, others) and acetaminophen (Tylenol, others), follow the instructions on the package. Taking too many pain relievers for a long

- **Maintain a healthy weight:** If you're at a healthy weight, maintain it by being physically active most days of the week. If you need to lose weight, talk with your doctor about strategies for healthy weight loss.

- **Don't smoke:** Cigarette smoking can damage your kidneys and make existing kidney damage worse. If you're a smoker, talk to your doctor about strategies for quitting. Support groups, counseling and medications can all help you to stop.

- **Manage your medical conditions with your doctor's help:** If you have diseases

or conditions that increase your risk of kidney disease, work with your doctor to control them. Ask your doctor about tests to look for signs of kidney damage.
Source: <https://www.mayoclinic.org/>



Normal kidney

Polycystic kidney

DRUG USE SCREENING

What are drug use screening tests?

Drug use screening tests are questionnaires designed to find out if you are abusing drugs. Drug abuse is a pattern of using drugs that can cause serious problems in your work, relationships, and health. Drug abuse can include taking illegal drugs or misusing legal drugs. Misuse means using the drugs for a nonmedical reason, such as getting high, or taking more than the prescribed dose. It can also mean taking someone else's medicine or taking medicine in a different way than you are supposed to, such as crushing and snorting tablets.

Drug abuse is a disease that can make you physically and mentally dependent on drugs. A drug use screening test can help your provider make an effective treatment plan for you.

Commonly abused drugs include:

- Marijuana
- Prescription opioid pain relievers, which include oxycodone, hydrocodone, morphine, and codeine
- Heroin, an illegal opioid
- Cocaine
- Methamphetamines
- Hallucinogens, which are drugs that cause hallucinations (seeing, hearing, and/or feeling things that are not real).

They include LSD and Ecstasy (MDMA).

Drug abuse may also be called drug addiction or substance abuse. Substance abuse can also refer to the abuse of other substances including alcohol and inhalants. Inhalants are household products, such as paint thinner and certain types of glue, that contain substances that affect perception and mood when inhaled.

Other names: Drug Abuse Screen Test (DAST); DAST-10; substance abuse screening; Screening, Brief intervention, and Referral to Treatment (SBIRT); Cut down Annoyed, Guilty, Eye-opener (CAGE) tool; Car, Relax, Alone, Forget, Friends, Trouble (CRAFFT) Screening Tool

WHAT ARE THEY USED FOR?

Drug use screening tests are used to diagnose drug abuse. Some tests can also show if you are at low, moderate, or high risk for complications from drug abuse.

WHY DO I NEED A DRUG USE SCREENING TEST?

You may need a screening test if you have symptoms of drug abuse. These include:

- An urgent need to take the drug on a daily or regular basis

- Hiding your drug use from others
- Making excuses to take the drug
- Continuing to take the drug even if it causes problems in your personal relationships, work, school, and/or health
- Building up a tolerance to the drug. That means you need more and more of the drug to feel its effects.

Many people who abuse drugs don't know or want to admit they have a problem. If your family, friends, or co-workers express concerns about your drug use, talk to your health care provider about getting a screening. Your provider may also recommend a screening if they notice signs and symptoms of the disorder.

WHAT HAPPENS DURING A DRUG USE SCREENING TEST?

Drug use screening may be done by your primary care provider or a mental health provider. A mental health provider is a health care professional who specializes in diagnosing and treating mental health problems. Some mental health providers specialize in treating drug abuse and similar disorders. Most of these questionnaires are also available online for self-testing.

TO PAGE 13

DIAGNOSING HEART CONDITIONS

FROM PAGE 04

CARDIAC COMPUTED TOMOGRAPHY (CARDIAC CT)

Cardiac CT uses a special X-ray machine, which moves around your body and takes detailed 3-D images of your heart.

THALLIUM SCAN (MYOCARDIAL PERFUSION SCINTIGRAPHY)

This scan shows how well blood is reaching the heart muscle through your coronary arteries. A small amount of thallium (radioactive substance) is injected into a vein, and a special camera moves around your heart. The camera picks up traces of thallium and produces pictures.

As thallium doesn't travel well to areas where there's a poor blood supply, the pictures can be used to see how well blood is reaching your heart. It's a useful alternative to an exercise test if this can't be done or when specific information on your heart muscle is needed which a treadmill exercise test can't provide.

This is done at rest and during exercise.

The very low levels of radiation used are considered to be safe.

CORONARY ANGIOGRAM

A coronary angiogram is a type of X-ray used to examine the coronary arteries supplying blood

to your heart muscle. It's considered to be the best method of diagnosing coronary artery disease - conditions that affect the arteries surrounding the heart.

During the test, a long, flexible tube called a catheter will be inserted into a blood vessel in either your groin or arm. The tip of the catheter will then be fed up to your heart and coronary arteries.

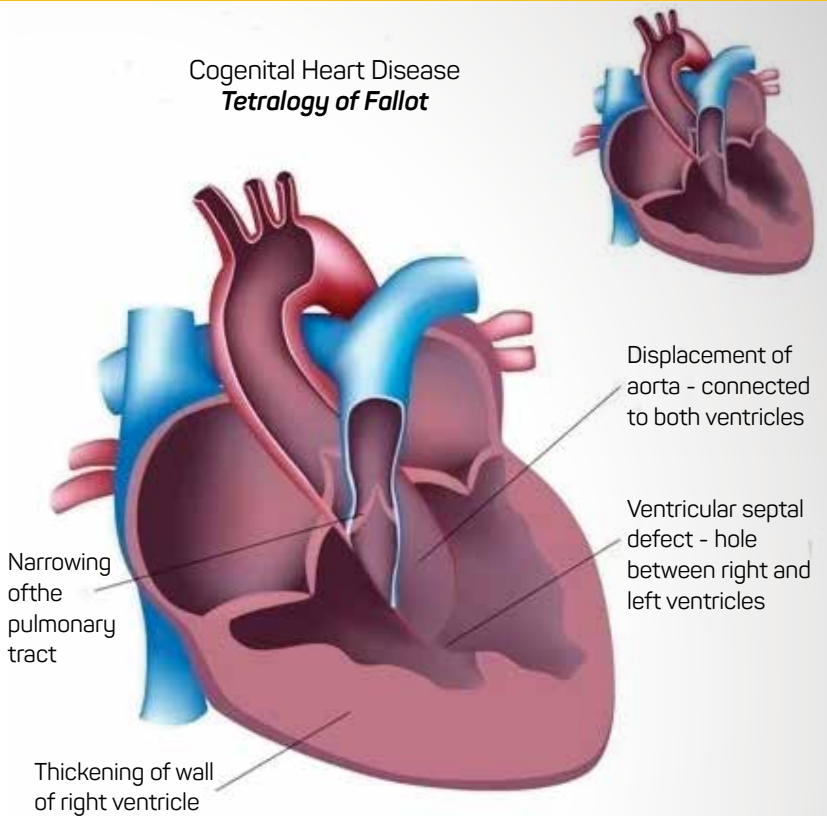
Special dye will then be injected through the fine catheter into your coronary arteries, and X-ray images will be taken. These images created during angiography are called angiograms.

These images will be used to identify narrowing or blockage of the arteries that may be responsible for your symptoms. This test is also sometimes required to reach a diagnosis for patients with heart valve and muscle disease.

BLOOD TESTS

There are a number of blood tests that can be done to rule out other causes of heart symptoms, and to measure different levels within the body that can affect the heart. You may also get blood tests done if you begin a new heart medicine.

The most common are:



Congenital Heart Disease
Tetralogy of Fallot

Narrowing of the pulmonary tract

Thickening of wall of right ventricle

Displacement of aorta - connected to both ventricles

Ventricular septal defect - hole between right and left ventricles

- Full Blood count (FBC) - this test measures the levels of red blood cells, white blood cells and platelets. It also measures the haemoglobin (oxygen carrying component of red blood cells).
- Urea and Electrolytes (Us and Es) - urea levels help to monitor how the kidneys are working. Electrolytes help to stabilise the heart rhythm.
- Glucose - this test measures the level of sugar in the blood.
- Liver and thyroid function - these tests measure liver function and the thyroid function.
- Troponin blood test - troponin is a protein which is released into the blood stream when the heart muscle is damaged. The troponin level provides a

quick and accurate measure of any heart muscle damage. It's used to help in the assessment following suspected heart attack. It may be taken on admission to hospital and/or 12 hours from the onset of symptoms.

- Cholesterol level and lipid profile.
- Natriuretic peptides - an indicator of heart failure.

CHEST X-RAY

A chest X-ray is useful for showing the size and shape of the heart and detecting chest disorders. This can provide doctors additional information about your symptoms (which can often relate to both chest and heart conditions) and can also show any fluid in the lungs, which may be caused by heart disease.

Source: <https://www.nhsinform.scot/>



Diagnofirm donates to Kumakwane Community

There is no better gift than providing warm blankets to the needy during winter season.

There was excitement in Kumakwane community as Diagnofirm carried forward the philanthropic work of the late Prof Mohammed Iqbal Chand by donating winter blankets.



Diagnofirm has ensured that this winter residents of Kumakwane who include the elderly and children do not feel cold.

The onset of winter this year have made them vulnerable, but at the same time it has given us an opportunity to serve humanity by donating to the needy.



DIAGNOFIRM
MEDICAL LABORATORIES
 PATHOLOGY YOU CAN TRUST

DIAGNOFIRM MAIN LABORATORY HEAD OFFICE:

Plot NO. 12583, Nyerere Drive, Private Bag 283 Gaborone

Phone: (+267) 3950007 Fax: (+267) 395980 E-mail: lab@diagnofirm.co.bw www.diagnofirm.co.bw

OPERATING HOURS

Mon - Fri: 0700 - 1800hrs
 Saturday: 0700 - 1500hrs
 Sunday: 0800 - 1300hrs

The only laboratory in Botswana accredited with SADCAS ISO15189:2012 for SARS-CoV-2(Covid-19)



EFFECTS OF DRUG ABUSE

Drug misuse, abuse, and addiction can all lead to both short-term and long-term health effects.

Drug misuse, abuse, and addiction can all lead to both short-term and long-term health effects.

The effects of drug abuse depend on the type of drug, any other substances that a person is using, and their health history.

In this article, we discuss the impact of drug abuse and explain how to treat drug addiction.

SHORT-TERM EFFECTS

Drugs are chemical compounds that affect the mind and body. The exact effects vary among individuals and also depend on the drug, dosage, and delivery method.

Using any drug, even in moderation or according to a medical prescription, can have short-term effects.

For instance, consuming one or two servings of alcohol can lead to mild intoxication. A person may feel relaxed, uninhibited, or sleepy.

Nicotine from cigarettes and other tobacco products raises blood pressure and increases alertness.

Using a prescription opioid as a doctor has instructed helps relieve moderate-to-severe pain, but opioids can also cause drowsiness, shallow breathing, and constipation.

Abusing a drug, or misusing a prescription medication, can produce other short-term effects, such as:

- changes in appetite
- sleeplessness or insomnia
- increased heart rate
- slurred speech
- changes in cognitive ability
- a temporary sense of euphoria
- loss of coordination

Drug abuse can affect aspects of a person's life beyond their physical health. People with substance use disorder, for example, may experience:

- an inability to cease using a drug
- relationship problems
- poor work or academic performance
- difficulty maintaining personal hygiene
- noticeable changes in appearance, such as extreme weight loss
- increased impulsivity and risk-taking

- behaviors
- loss of interest in formerly enjoyable activities

LONG-TERM EFFECTS

Drug abuse, especially over an extended period, can have numerous long-term health effects.

Chronic drug use^{Trusted Source} can alter a person's brain structure and function, resulting in long-term psychological effects, such as:

- depression
- anxiety
- panic disorders
- increased aggression
- paranoia
- hallucinations
- Long-term drug use can also affect a person's memory, learning, and concentration.

The long-term physical effects of drug use vary depending on the type of drug and the duration of use. However, experts have linked chronic drug use with the following health conditions:

CARDIOVASCULAR DISEASE

Stimulants, such as cocaine and methamphetamines, can damage the heart and blood vessels.

The long-term use of these drugs can lead to coronary artery disease, arrhythmia, and heart attack.

RESPIRATORY PROBLEMS

Drugs that people smoke or inhale can damage the respiratory system and lead to chronic respiratory infections and diseases.

Opioids slow a person's breathing by binding to specific receptors in the central nervous system that regulate respiration. By depressing a person's respiration, these drugs can lead to slow breathing or heavy snoring.

A person may stop breathing entirely if they take a large dose of an opioid or take it alongside other drugs, such as sleep aids or alcohol.

KIDNEY DAMAGE

The kidneys filter excess minerals and waste products from the blood. Heroin, ketamine, and synthetic cannabinoids can

cause kidney damage or kidney failure.

LIVER DISEASE

Chronic drug and alcohol use can damage the liver cells, leading to inflammation, scarring, and even liver failure.

OVERDOSE

Taking too much of a drug or taking multiple drugs together can result in an overdose.

HOW TO GET HELP

Finding the right treatment program can be a daunting task. Here are a few things to think about when seeking treatment for drug abuse, misuse, or addiction:

- consider whether inpatient or outpatient services would be the best fit
- find local treatment centers using this resource from the Substance Abuse and Mental Health Services Administration
- note that state-run treatment centers and programs can be free of charge
- look for programs that use evidence-based treatment strategies

TREATMENT

Anyone providing drug addiction treatment should tailor it to suit a person's individual needs to ensure that it is effective.

Treatment may involve some of the following components:

- **Behavioral therapy**, which helps people build positive coping strategies and develop problem-solving skills.
- **Group therapy**, which gives people the chance to acknowledge, share, and work through the psychological aspects of recovery with a group of peers under professional guidance.
- **Medications** to help minimize withdrawal symptoms.
- **Additional medical care**, which may include vocational training and other resources that address problems associated with chronic drug abuse, such as mental health conditions, unemployment, and medical conditions.

Source: <https://www.medicalnewstoday.com/>

DRUG USE SCREENING

What are drug use screening tests?

FROM PAGE 08

There are different types of drug use screening tests. But they each include questions about your drug use and how it affects your life. The most commonly used drug abuse screening tests are:

Drug Abuse Screen Test (DAST, also known as DAST-10). This test contains 10 yes or no questions about how much and how often you take drugs. It also asks if the drugs are causing problems in your life and health. The answers are scored on a point system. A score of 8 or more may indicate a drug problem.

NIDA Drug Use Screening Tool, also known as the NIDA Quick Screen. This test, from the National Institute on Drug Abuse (NIDA), contains questions about how often you use prescription drugs, illegal drugs, tobacco, and alcohol. There is one multiple choice question for each substance. The answers range from "never" to "daily." If you use any of the substances more often than never, it may mean you have a substance abuse problem.

NIDA Modified Alcohol, Smoking, and Substance Involvement Screening (NM ASSIST). It asks more in-depth questions about the frequency and type of drugs used. It is scored on a point system. The higher your score, the more at risk you are.

Cut-down Annoyed, Guilty, Eye-opener (CAGE). This contains the following yes or no questions:

- Have you ever felt the need to **cut-down** on your drug use?
- Do you ever feel **annoyed** when people criticize your drug use?
- Have you ever felt embarrassed or **guilty** about

your drug use?

- **Eye-opener:** Have you ever used drugs first thing in the morning?

Two or more "yes" answers may indicate a drug problem.

Car, Relax, Alone, Forget, Friends, Trouble (CRAFT). This test is designed for teens and includes the following yes or no questions about drug and alcohol use:

- Have you ever ridden in a car driven by someone (including yourself) who was high or had been using alcohol or drugs?
- Do you ever use alcohol or drugs to relax, feel better about yourself, or fit in?
- Do you ever use alcohol/drugs while you are alone?
- Do you ever forget things you did while using alcohol or drugs?
- Do your family or friends ever tell you that you should cut down on your drinking or drug use?
- Have you gotten into trouble while you were using alcohol or drugs?

Two or more "yes" answers to these questions may indicate a drug problem.

These questionnaires may be used along with an approach called **Screening, Brief intervention, and Referral to Treatment (SBIRT)**. SBIRT is targeted to developing short-term counseling and educational strategies to change unhealthy drug use. If your test shows you have or are at risk for a serious drug problem, a long-term treatment plan may be recommended.

WILL I NEED TO DO ANYTHING TO PREPARE FOR THE TEST?

You don't need any special preparations for a drug use screening test.



A Thin-Film Microextraction Procedure for the Illicit Drug Screening of Biofluids

ARE THERE ANY RISKS TO THE TEST?

There is no risk in taking a questionnaire.

WHAT DO THE RESULTS MEAN?

Results may show whether you are abusing drugs and the severity of the problem. The results can help your provider develop a treatment plan that is right for you.

IS THERE ANYTHING ELSE I NEED TO KNOW ABOUT DRUG USE SCREENING TESTS?

Treatment for drug abuse depends on the type of drug and the severity of abuse. Treatment options include:

- Brief or long-term counseling from a mental health provider who specializes in treating drug abuse
- Support groups. There are different approaches and formats to drug abuse support groups. Talk with your provider to find a group and approach that's right for you. Medication-assisted

treatment.

- Medication-assisted treatment. Certain medications can help establish normal brain function and decrease cravings. This may help prevent a relapse. Medications can also make it safer to handle the unpleasant and sometimes dangerous symptoms of withdrawal (symptoms that can happen when you cut back or stop taking drugs).
- Residential treatment programs. If you have a more serious drug problem, you may be helped by a stay in a facility that specializes in treating drug abuse. These facilities offer a range of treatment services. Stays can last anywhere from one month to a year, depending on your condition.

More severe cases of drug abuse, such as a drug overdose, may require emergency treatment in a hospital.

Source: <https://medlineplus.gov/>

the family

CLINIC & SURGERY

MACHA MEDICAL CENTRE
"We believe in Service Excellence"

Contact: Tel/Fax: +267 391 7003
Cell: +267 7328 4965 / +267 7564 5967
Email: thefamilypractice13@yahoo.com

DR. MOONO E. MUNSANJE
Medical Director

Plot No 449 Isang Close Ext 4
(near Tebelopele),
Gaborone, Botswana
P. O Box AD 25 AEG station
Gaborone, Botswana

SERVICES

General Adult & Children's Clinic • SRH / Gynecological Services
Medical Examination • Scanning



Gerald's Holdings (Pty) Ltd

MEDICAL DIAGNOSTICS IMAGING

fluent in imaging

Gerald M.Z- Supt Rad./Private Practice

based in Greater Gaborone- contacts- (Gerald M Z (Supt Rad)
Tel: 3911529, APP 75098683 | Cell: 71899311

★ KWENENG VETERINARY CLINIC ★

DR. JOHN RUKWAVA
BVSc

Veterinary Surgeon

Plot 23805, Phase 4
Gaborone West - Botswana
P. O Box 233 Mogodisthane

Tel: (+267) 390 0468
Cell: (+267) 7216 4673
Fax: (+267) 393 3699

Email: johnrukwava70@gmail.com



DR. M. H. KHAN

(+267) 39 340 11
(+267) 39 345 18
(+267) 71 73 7151
mhkhanbw@yahoo.co.uk

895 KAUNDA Road Extension 2
Gaborone P O Box 21714
Bontleng Gaborone

one

DENTAL CLINIC

Dr. Mphoentle Thangwane
dental surgeon

Plot 949 Ex2, Kaunda Rd
P. O. Box 21357, Gaborone, Botswana
Tel: (+267) 74 663 412 Fax: (+267) 77 995 811
Email: mgthangwane@gmail.com

MED-LINK

SPECIALIST CLINIC

Dr Matshidiso Mokgwathi M.D. FCP (SA), MMED (UB)
Specialist Physician - Internal Medicine

Bokamoso Private Hospital
Medical North, Doctors' Suites
Plot # 4769, Mmopane Block 1
Molepolole Road

BOOKINGS: +267 369 4842 / 71578763
medlinkspecialistclinic@gmail.com

Vision Clarity

- OPTOMETRISTS -

Plot No: 2838, Thebe Crescent
Off Church Road, Ext 10
Gaborone, Botswana

P O Box 202077
Gaborone, Botswana

Ethel Letshwiti - Monggae

Optometrist & Contact Lens Practitioner
B.Optom UJ (SA)

BHPC No: ROptom-2010-HP000004933-LG1
<https://m.facebook.com/visionclarityoptometrists>

+267 3113335 Fax: 3113336

+267 71852873

info@visionclarity.co.bw



DR. GEOFFREY MULUNGU
General Practitioner

Plot 176, Phaphane Ward, Opp. Sedibelo Hotel
P.o. Box 46713, Gaborone

Tel/Fax: +267 5729413, Mobile: +267 74846034
E-mail: geomulungu@gmail.com

Mul+iCare

MEDICAL CENTRE

Dr. Isabella N. Maeda



Tlokweng
Border Gate Mall
Suite No. 4
P.O. Box 20080, Gaborone
Botswana

MBChB(Dar); PGD (Stell)
General Practitioner

Tel: 391 3731
Fax: 391 3729
Cell: 72554871
maedakatumba@yahoo.co.uk

urban lifes+yle

PHYSIOTHERAPY

Back Pain • Sports Injuries • Work Related Injuries • Bone, Muscle & Joint Aches



**Keitumetse Ingrid Makuku
Dietitian**

P.O. Box 501444, Gaborone, Botswana
cell: 72251812 / 73280870 / 73952378 email: bonatlawellness@gmail.com

Services offered include: Nutrition Advise, Nutrition Counselling, Nutrition Education, Nutrition Coaching on lifestyle conditions including overweight and obesity, Diabetes, high Blood Pressure, Allergies, Weight Gain, malnutrition, Nutrition Empowerment sessions for kids, Menu Review and Development in the Food Service Industry, Sports Nutrition, Fruit Smoothie preparations and supply to individuals and Corporates,



Dr. Samera Siddiqi
General Practitioner
M.B.B.S, NUST (Pak) D.P.D CARDIFF UNI (UK)

Cell: 724 592 08
Tel: 3903132
Fax: 390 3134
Email: doctorsiddiqi@gmail.com

P.O. Box 404326,
Gaborone,
Plot 12581, Partial Nyerere Drive,
Gaborone

There is no medicine like hope, no incentive so great
and no tonic so powerful as expectation of something better tomorrow

DR. V. S. R. GULLAPALLI

Medical Practitioner

P.O. Box 70749,
Gaborone, Botswana
Tel: 393 4139, Cell 71778267
email: vsrgee@yahoo.com



Optical Centre (Botswana) Pty Ltd.

OPHTHALMIC AND DISPENSING OPTICIANS

Head Office:
Plot 1154, Botswana Road Gaborone | Tel: 3933874, Fax: 3933875
Email: opticscb@gmail.com
Po Box 379, Gaborone
Branch: Plot 684, Botswana Road | Tel/Fax: 3906689



**DR. KIRIGITI'S PRIVATE
CLINIC**

**DR. E. V. Kirigiti (MBBS)
Private Medical Practitioner**

Bontleng Mall | Plot No 8769
P.O. Box AD 643 ADD, Gaborone, Botswana
Tel: 397 4540 | Cell 72107852 | email: zenjivest@gmail.com



Dr. Innocent Mungandi

Plot 4921 Village Medical Centre • Moselebe Road, Gaborone
Tel: 371 0300 / 391 2842 • Fax: 271 0302 / 391 2686

General Practitioner
BSc, MBChB, Dcardiol (Lond),
MSc Fellow, Cardiovascular Medicine (Wales)

Cell: 75959706
email: operations@cardiacclinic.co.bw
docinnocent@yahoo.com



Unit: 11, Lot: 171, Oasis Hotel Premises
Zecrust Road, Tlokweng, Botswana
Cell: (+267) 74526085
E-mail: tanya_optom@hotmail.com



At Eye Light Optometrists we have developed a unique model inspired by 'education through service' through which we provide customers with a re-defined Eye-Checkup Experience by a professional who has over 25 years of experience in the field and counting!

Thanuja Panicker

Secretary - Botswana Optometrists Association
Vice Chairman - Sight Preservation (Lions District 412 - Botswana, Malawi, Mozambique & Zimbabwe)
Centennial Charter Lions Club of Greater Gaborone - Club President (2017-2018)
Refractive Services Co-ordinator, PEEK Vision Botswana, Ministry of Health

Dr. JOHN B. AYO

MB, CHB (Makerere)
Cell: 721 077 96
Email: ayo@btcmail.co.bw

Polyhealth Service
P.O. Box 403036
Gaborone
Botswana

Plot 406
Kgasa Road
Extension 4, Gaborone
Tel: 395 1433 (Surgery)
393 0002 / 397 1111
Fax: 391 3565 (Res)



DIAGNOFIRM
MEDICAL LABORATORIES
PATHOLOGY YOU CAN TRUST

HEAD OFFICE: Plot No. 12583, Nyerere Drive | Private Bag 283, Gaborone | Phone (+267) 395 0007
Emergency (+267) 72 5380 98 / 71 3203 31 | Fax (+267) 395 7980 | E-mail: lab@diagnofirm.co.bw | www.diagnofirm.co.bw

BRANCH AND DEPOT CONTACTS

Head Office Gaborone Laboratory

Plot 12583, Nyerere Drive, Middlestar, Gaborone
Tel: 395 0007 Fax: 395 7980
Mon-Fri: 08:00AM - 05:00PM
Sat: 07:00AM - 03:00PM Sun: 08:00AM - 01:00PM

DEPOTS AROUND GABORONE

Independence Depot:

Plot 258/259/260, Molefi Close, Extension 5, Gaborone, Tel: 373 2973
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 12:00PM

Gaborone Airport

SSKIA, Gaborone, Tel: 395 0007
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 03:00PM
Sun: 08:00AM - 01:00PM

Broadhurst Depot:

Plot 13128/02, Legae Centre, Broadhurst, Gaborone, Tel: 3732975
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 12:30PM

Fairgrounds Depot:

Medswana House Fairgrounds, Gaborone, Tel: 373 2970
Mon-Fri: 08:00AM - 05:00PM
Sat: Closed

Extension 2 Depot:

Plot 838, Pabalelo Way, Extension 2, Gaborone. Tel: 373 2978
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 12:30PM

Broadhurst Industrial Depot:

Plot 4754, Dr. Kadiyala Surgery, Gaborone, Tel: 373 2979
Mon-Fri: 08:00AM - 08:00PM
Sat: 08:30AM - 12:30PM

Extension 10 Depot

Plot 2819, Thebe Circle, Extension 10, Gaborone. Tel: 373 2980
Mon-Fri: 08:30AM - 05:30PM
Sat: Closed

Karong Clinic Depot:

Plot 334, Marina Park, Extension 5, Gaborone, Tel: 373 2971
Mon-Fri: 08:00AM - 05:00PM
Sat: Closed

CBD Depot:

Plot 54373, Matante Mews, Inside Zeta Clinic Gaborone, Tel: 373 2981
Mon-Fri: 08:00AM - 08:00PM
Sat: 08:30AM - 12:30PM

Village 1 Depot:

Plot 4921, Village Medical Centre, Gaborone. Tel: 373 2977
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 12:30PM

Village2 Depot

Kalafhi Medical Centre, Plot 21104, Village Gaborone, Cell: 3950007
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Game City Depot:

Unit 12 A, Game City Mall, Gaborone, Tel: 373 2982
Mon-Fri: 08:00AM - 07:00PM
Sat & Sun: 08:00AM - 03:00PM

Molapo Crossing Depot:

Unit 107, Molapo Crossing Mall, Gaborone, Tel: 373 2983
Mon-Fri: 08:00AM - 05:00PM
Sat: 09:00AM - 01:00PM

Bodiba Mall Depot:

Plot 13446, Unit 8A, Bodiba Mall Mogoditshane, Gaborone, Tel: 373 2972
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 12:00PM

Gwest Depot:

Salex house, Gwest Mall, Gaborone, Tel: 373 2984
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Phakalane Depot:

Plot 42794, Unit 2, Phakalane Medical Centre, Gaborone, Tel: 373 2987
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 12:30PM

Setlhoa 1 Depot:

Unit 11, Setlhoa Retail Park, Block 10, Gaborone. Tel: 3732969
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Setlhoa2 Depot

Unit-2, Setlhoa Retail Park, Block10, Gaborone Tel: 373 2986
Mon-Fri: 08:00AM - 05:00PM

TurnRight Mall

Plot 62, Shop 15, Inside AO Clinic, Mogoditshane, Gaborone Tel: 373 2974
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Airport Junction Depot:

Plot 70665, Unit-24&24A, Inside MRI Clinic, Gaborone, Tel: 373 2988
Mon-Fri: 09:00AM - 07:00PM
Sat: 09:00AM - 03:00PM

Acacia Mall Depot:

Plot 75123, Unit 14A, Phakalane, Gaborone, Inside Dr. Gure's Clinic, Tel: 373 2989
Mon-Fri: 09:00AM - 07:00PM
Sat: 09:00AM - 03:00PM

Mogoditshane Depot:

Plot No 1296, Unit 1, Mogoditshane, Gaborone Tel: 373 2986
Mon-Fri: 08:00AM - 05:00PM

Railpark Mall

Plot 471, Unit G37A Inside A O Clinic, Railpark Mall, Gaborone, Tel: 3732985
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Mainmall Depot

Kalafhi Medical Centre Mainmall, Gaborone Cell: 73 465 125
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

BRANCHES AROUND BOTSWANA

Maun Airport

MIA, Maun, Tel: 6860330
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Kasane Airport

KIA, Kasane, Tel: 3732959
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Jwaneng Depot

Jwaneng Medical Centre Plot 2325, Jwaneng Mall Jwaneng, Cell: 73 465 188
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Palapye Depot:

Unit -4, Palapye Junction Mall Palapye Tel: 4900066
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Ramotswa Depot:

Plot 16&17, Lesetlhana Ward Cell: 7569 8913
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Selebi Phikwe Laboratory

Inside BCL Mine Hospital Selebi Phikwe Tel: 260 0599 Fax: 260 1633
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Francistown Laboratory:

Plot 467, Unit-7, Blue Jacket Street, Francistown. Tel: 241 2610, Fax: 241 2613
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Maun Laboratory:

Plot 726, Old Mall Maun Tel: 686 0330, Fax: 686 0296
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Kazungula Laboratory

Shop 25, Borogo Junction Mall, Kazungula Tel: 625 2244, Fax: 625 2268
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Kalafi Tlokweng

Kalafhi Medical Centre, Tlokweng Gaborone Cell: 73 465 129
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Palapye Laboratory:

Unit 1B, Lotsane Complex, Palapye. Tel: 490 0066, Fax: 490 0181
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Kanye Depot

Plot 262, Desai Shopping Complex, Sebonego ward, Kanye, Tel: 544 1739
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Lobatse Depot:

Plot 238, Letsholathebe Road, Lobatse. Tel: 530 0162
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Serowe Depot:

Plot 100, Jet Hardware Complex, Opp Shell filling station, Serowe. Tel: 76771340
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Molepolele 1 Depot:

Plot 7088, Unit 4 & 5, Inside A O Clinic, Molepolele Cell: 77 84 87 41
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Molepolele 2 Depot

Universal Family Clinic Dorset Complex Opp Police Station, Molepolole Cell: 77 848 741
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Mahalapye Depot:

Unit-6, Plot 4729, Kimberly Fashions Mall, Mahalapye, Cell: 77 84 98 13
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Francistown 1 Depot:

Spring Health Care, Nzano Shopping Centre, Francistown. Tel: 373 2964
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Francistown 2 Depot

Lordsland Medical Centre Plot 7027, Minestone Francistown, Cell: 73 925 460
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Francistown 3 Depot

Gold Valley Shopping Centre, Unit 15, Francistown. Cell: 73 925 487
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Kasane Depot:

Plot No 720, President Avenue Kasane Cell: 76 7713 41
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Lethakane Depot:

Unit 1, Tawana Ward, Rapha Complex, Lethakane Cell: 75 6989 14
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00AM - 01:00PM

Ghanzi Depot:

Plot 675, Kgosi Sebele Street, Next to Delta Pharmacy, Ghanzi, Tel: 373 2966
Mon-Fri: 08:00AM - 05:00PM

Mochudi Depot:

Unit 176, Raserura Road, Inside Botsogo Medical Centre, Mochudi, Cell: 75 6611 25
Mon-Fri: 08:00AM - 06:00PM
Sat: 08:00AM - 02:00PM

Moshupa Depot

Plot 20586, Office 08 Jerusalem Mall Moshupa Cell: 76 092 613
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Otse Depot

Ushanore Otse Health Care Centre, Plot 1625, Ikageleng Ward Otse Cell: 73 925 486
Mon-Fri: 08:00AM - 05:00PM
Sat: 08:00 AM - 01:00PM

Email: lab@diagnofirm.co.bw

Web: www.diagnofirm.co.bw

Diagnofirm (Mobile App): App Store/Google play

Online Services: www.diagnofirm.co.bw/onlineservices

Newsletter: www.diagnostic-update.com



DIAGNOFIRM
MEDICAL LABORATORIES
PATHOLOGY YOU CAN TRUST!

