

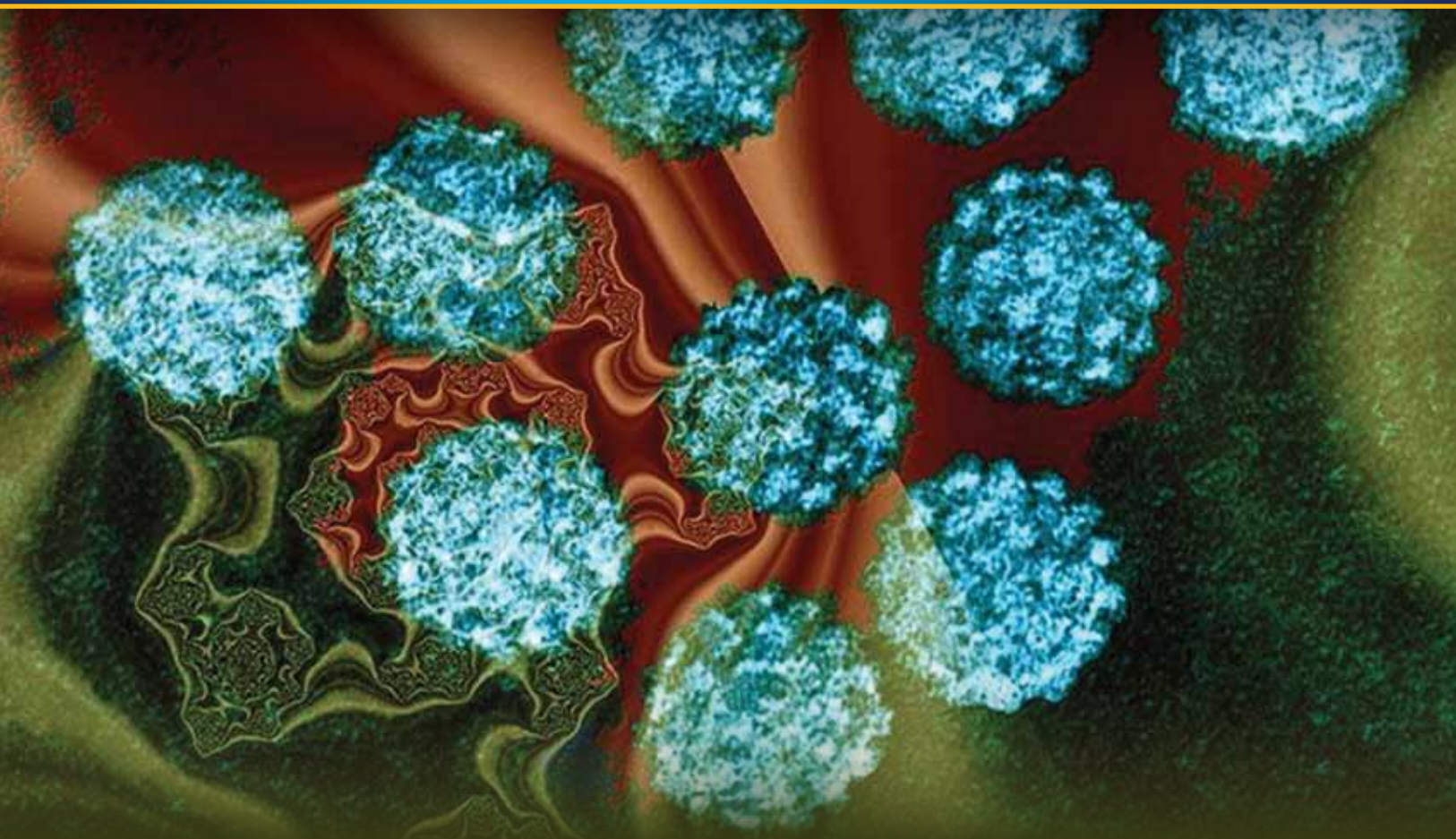
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NEW SCREENING METHOD FOR CERVICAL CANCER

- Pg 04

CERVICAL CANCER
SCREENING

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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.

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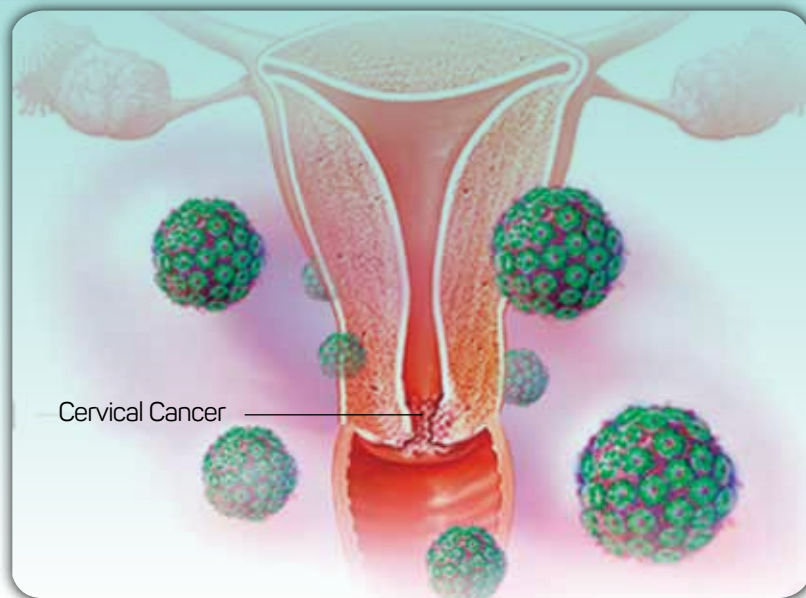
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IMPORTANCE OF CERVICAL CANCER SCREENING WITH HPV TEST, PAP TEST OR BOTH

QUESTION: *I'm a 32-year-old woman, and I've always gotten a Pap test at the recommended time. Now my doctor suggests that I get an HPV test, too. Why would I need both? Won't the Pap show if there are any problems?*

ANSWER: *This is a great question as this area generates a lot of confusion. A Pap test is an important screening exam that's used to check for abnormal cells on the cervix that could indicate early-stage cervical cancer or precancerous cells. The test for human papillomavirus, or HPV, also is important because if you have that virus, it raises your risk for developing cervical cancer. Knowing if you have HPV or not can inform and direct your health care in the future.*



Cervical cancer occurs in the cells of the cervix — the lower part of the uterus that connects to the vagina. Cervical cancer rarely causes symptoms in its early stages. The earlier it's detected, however, the more likely it is that cervical cancer can be treated effectively. That's why it's so crucial to have cervical cancer screening with an HPV test, Pap test or both on a regular basis.

A Pap test is performed during an office visit with your health care provider and takes only a few minutes. It involves collecting and examining cells from the cervix. If the test finds abnormal cells, your health care provider will recommend additional tests to look further for precancerous or cancerous cells.

Along with a Pap test, HPV testing also provides useful information to your health care provider. An HPV test can be done at the same time as a Pap test and uses the same cell sample collected for the Pap test. The HPV test doesn't tell you whether you have cancer. Instead, it detects the presence of HPV in your body. HPV is a common sexually transmitted infection, and it plays a role in causing almost all cervical cancer.

If you have HPV — particularly the types that are most closely linked to cervical cancer, such as types 16 and 18 — then you are at higher risk for developing cervical cancer. Knowing that, you and your health care provider can decide how often you need Pap tests and other tests to monitor your condition going forward.

The reason your health care provider hasn't mentioned HPV testing to you before probably is due to your age and recent changes in screening recommendations. The HPV test in women under 30 has not been common in the U.S. and usually was not requested in young women unless there had been prior abnormal Pap tests. HPV spreads through sexual contact and is very common in young women. Because of that, HPV test results in that age group frequently are positive. However, HPV infections often clear on their own within a year or two, particularly in younger women. After that, they typically aren't cause for concern.

Not all types of HPV increase the risk of cervical cancer. The HPV vaccine protects against the types of HPV that are most likely to cause cervical cancer. The vaccine works better when given to girls starting at age 9 but has now been approved for

women through age 45.

In women older than 30, detecting a high-risk HPV infection poses greater risk. In that population, it's more likely the infection has been in a woman's system for a longer period of time, or it may have reactivated after an earlier infection. In either case, the likelihood that the virus could trigger cervical cell changes that lead to cancer is much higher than it is in younger women. Due to the higher risk of cervical cancer, more frequent testing is recommended in older women. It is important to note, though, that most women with a positive HPV test do not develop cervical cancer.

How often you need a Pap test and an HPV test depends on your individual situation. In general, the recommendation is to have both tests done every five years for women older than 30 who haven't had an abnormal Pap test in the past. That may shift, however, depending on your medical history, as well as other health issues you may have. Talk with your health care provider about the schedule that's best for you. — Dr. Margaret E. Long, Obstetrics and Gynecology, Mayo Clinic, Rochester, Minnesota.

Source: newsnetwork.mayoclinic.org

NEW SCREENING METHOD FOR CERVICAL CANCER

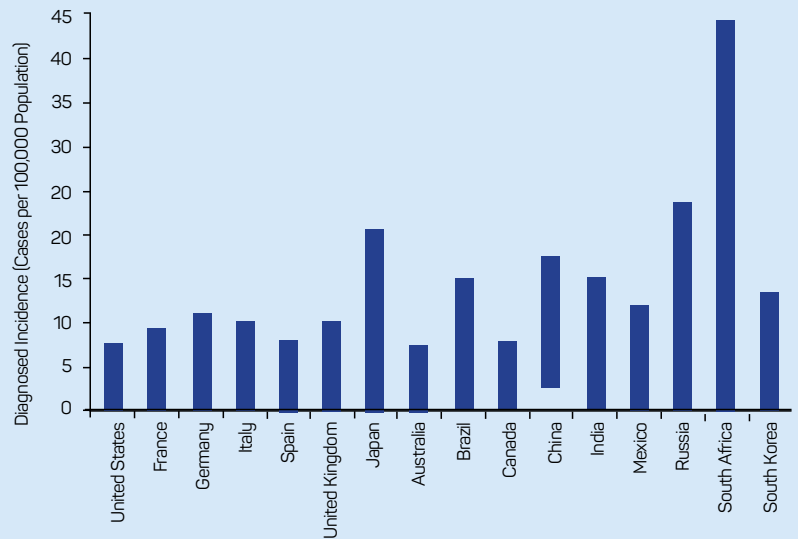
MAY IMPROVE EARLY DIAGNOSIS

Currently, screening for cervical cancer relies on the results from a pap smear test. In this a sample of cells are obtained from the cervix and analyzed for abnormal changes. However, recent findings suggest an easier, less invasive method for screening and diagnosis.

According to data published by UK researchers and presented at the 2019 National Cancer Research Institute (NCRI) Cancer Conference in Scotland, an at-home urine or vaginal swab test could potentially be used as an alternative to the smear test.

This would not require a visit to the doctor's. Importantly, it could help more women discover if they are at risk of cervical cancer. The study enrolled a sample of 600 female patients. These were attending the colposcopy clinic as a result of an abnormal screening or a positive human papillomavirus (HPV) result at Royal London Hospital. The results showed that the urine/swab test had about a 73% chance of correctly identifying women with advanced abnormal cells. This is similar to the accuracy of the standard pap smear test. More significantly, test accuracy rose to 96% in women with HPV.

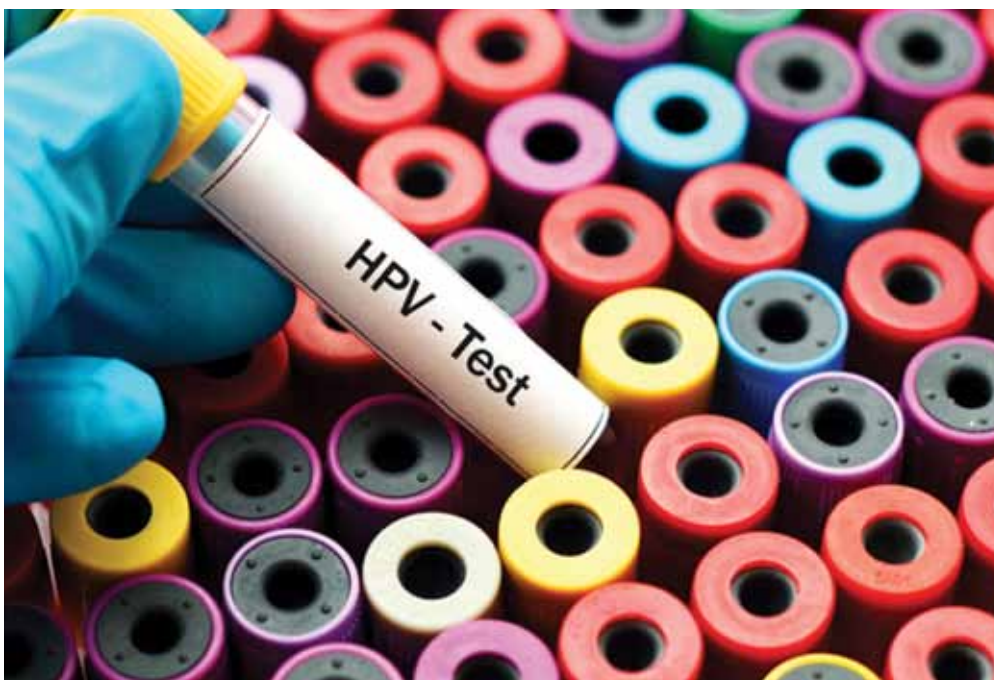
Diagnosed Incidence of Cervical Cancer (Cases per 100,000 Population) 2018, Women, All Ages



Higher screening rates for cervical cancer would encourage earlier detection

These findings are encouraging, especially for women who find

the pap smear test difficult. They could ultimately result in higher screening rates due to better accessibility and ease of use. Importantly, a higher screening uptake would allow for earlier disease detection and improve health outcomes.



Should this new screening test replace or supplement the current gold standard pap smear test, GlobalData epidemiologists predict that the diagnosed incidence of cervical cancer will likely significantly increase. This is from the current 2018 estimates observed in the sixteen major pharmaceutical markets (16MM: US, France, Germany, Italy, Spain, UK, Japan, Australia, Brazil, Canada, China, India, Mexico, Russia, South Africa, and South Korea) (as shown in Figure).

While these results are promising, more research is needed before the new screening tool can officially be implemented. Researchers should focus on conducting larger, multi-centre studies to better understand and elaborate on the findings from this study.

BIRTH DEFECTS



Cleft Palate

Cleft palate is a congenital deformity resulting in an opening in the upper lip caused by failure of the facial structures to fuse.

1. Unilateral

2. Bilateral

Clubfoot

Club foot is a congenital deformity in which one or both feet appear to be rotated internally at the ankle.






Gastroschisis

Gastroschisis is a congenital defect in the anterior abdominal wall which allows for the contents of the digestive system to protrude.

1 baby in 30 is born with one or more Major Birth Defects

Most are correctable with modern surgery

1. Radial dysplasia is a congenital deformity resulting in radial deviation in the wrist and shortening of the forearm.
2. Webbed toes (or syndactyly) is the partial or complete fusion of two or more toes.
3. Polydactyly is a congenital physical abnormality resulting in the growth of extra digits on the hand.





1. Spina bifida occulta
2. Spina bifida with meningocele
3. Spina bifida with meningocele
4. Spina bifida with myeloschisis

Spina Bifida

Spina bifida is caused by the incomplete closing of the embryonic neural tube. A developmental congenital disorder, vertebrae remain incomplete (open) in their formation. If the opening is large enough the spinal chord emerges through the bone.



ABOUT BIRTH DEFECTS

A birth defect is a problem that occurs when a baby is developing in utero (in the womb). Approximately 1 out of every 33 babies Trusted Source in the United States

is born with a birth defect. Birth defects can be minor or severe. They may affect appearance, organ function, and physical and mental development. Most birth

defects are present within the first three months of pregnancy, when the organs are still forming. Some birth defects are harmless. Others require long-term

medical treatment. Severe birth defects are the leading cause of infant death in the United States, accounting for 20 percent Trusted Source of deaths.

WHAT CAUSES BIRTH DEFECTS?

Birth defects can be a result of:

- genetics
- lifestyle choices and behaviors
- exposure to certain medications and chemicals
- infections during pregnancy
- a combination of these factors

However, the exact causes of certain birth defects are often unknown.

Genetics

The mother or father may pass on genetic abnormalities to their baby. Genetic

abnormalities occur when a gene becomes flawed due to a mutation, or change. In some cases, a gene or part of a gene might be missing. These defects happen at conception and often can't be prevented. A particular defect may be present throughout the family history of one or both parents.

Nongenetic causes

The causes of some birth defects can be difficult or impossible to identify. However, certain behaviors greatly increase the risk of birth defects. These include smoking, using illegal drugs, and drinking alcohol while pregnant. Other factors, such as exposure to

toxic chemicals or viruses, also increase risk.

WHAT ARE THE RISK FACTORS FOR BIRTH DEFECTS?

All pregnant women have some risk of delivering a child with a birth defect. Risk increases under any of the following conditions:

- family history of birth defects or other genetic disorders
- drug use, alcohol consumption, or smoking during pregnancy
- maternal age of 35 years or older

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BIRTH DEFECTS

FROM PAGE 05

- inadequate prenatal care
- untreated viral or bacterial infections, including sexually transmitted infections
- use of certain high-risk medications, such as isotretinoin and lithium

Women with pre-existing medical conditions, such as diabetes, are also at a higher risk of having a child with a birth defect.

Common birth defects

Birth defects are typically classified as structural or functional and developmental.

Structural defects are when a specific body part is missing or malformed. The most common structural defects are:

- heart defects
- cleft lip or palate, when there's an opening or split in the lip or roof of the mouth
- spina bifida, when the spinal cord doesn't develop properly
- clubfoot, when the foot points inward instead of forward

Functional or developmental birth defects cause a body part or system not to work properly. These often cause disabilities of intelligence or development. Functional or developmental birth defects include metabolic defects, sensory problems, and nervous system problems. Metabolic defects cause problems with the baby's body chemistry.

The most common types of functional or developmental birth defects include:

- Down syndrome, which causes delay in physical and mental development
- sickle cell disease, which occurs when the red blood cells become misshapen
- cystic fibrosis, which damages the lungs and digestive system

Some children face physical problems associated with specific birth defects. However, many children show no visible abnormalities. Defects can

sometimes go undetected for months or even years after the child is born.

HOW ARE BIRTH DEFECTS DIAGNOSED?

Many types of birth defects can be diagnosed during pregnancy. A healthcare professional can use prenatal ultrasounds to help them diagnose certain birth defects in utero. More in-depth screening options, such as blood tests and amniocentesis (taking a sample of the amniotic fluid), may also be done. These tests are usually offered to women who have higher-risk pregnancies due to family history, advanced maternal age, or other known factors.

Prenatal tests can help determine whether the mother has an infection or other condition that's harmful to the baby. A physical examination and hearing test may also help the doctor diagnose birth defects after the baby is born. A blood test called the newborn screen can help doctors diagnose some birth defects shortly after birth, before symptoms occur.

It's important to know that prenatal screening doesn't always find defects when they're present. A screening test can also falsely identify defects. However, most birth defects can be diagnosed with certainty after birth.

HOW ARE BIRTH DEFECTS TREATED?

Treatment options vary depending on the condition and level of severity. Some birth defects can be corrected before birth or shortly after. Other

defects, however, may affect a child for the rest of their life. Mild defects can be stressful, but they don't typically affect overall quality of life. Severe birth defects, such as cerebral palsy or spina bifida, can cause long-term disability or even death. Speak with your doctor about the appropriate treatment for your child's condition.

Medications: Medications may be used to treat some birth defects or to lower the risk of complications from certain defects. In some cases, medication may be prescribed to the mother to help correct an abnormality before birth.

Surgeries: Surgery can fix certain defects or ease harmful symptoms. Some people with physical birth defects, such as cleft lip, may undergo plastic surgery for either health or cosmetic benefits. Many babies with heart defects will need surgery, as well.

Home care: Parents may be instructed to follow specific instructions for feeding, bathing, and monitoring an infant with a birth defect.

HOW CAN BIRTH DEFECTS BE PREVENTED?

Many birth defects can't be prevented, but there are some ways to lower the risk of having a baby with a birth defect. Women who plan to become pregnant should start taking folic acid supplements before conception. These supplements should also be taken throughout the

pregnancy. Folic acid can help prevent defects of the spine and brain. Prenatal vitamins are also recommended during pregnancy.

Women should avoid alcohol, drugs, and tobacco during and after pregnancy. They should also use caution when taking certain medications. Some medications that are normally safe can cause serious birth defects when taken by a pregnant woman. Make sure to tell your doctor about any medications you may be taking, including over-the-counter drugs and supplements.

Most vaccines are safe during pregnancy. In fact, some vaccines can help prevent birth defects. There is a theoretical risk of harm to a developing fetus with some live-virus vaccines, so these kinds should not be given during pregnancy. You should ask your doctor which vaccines are necessary and safe.

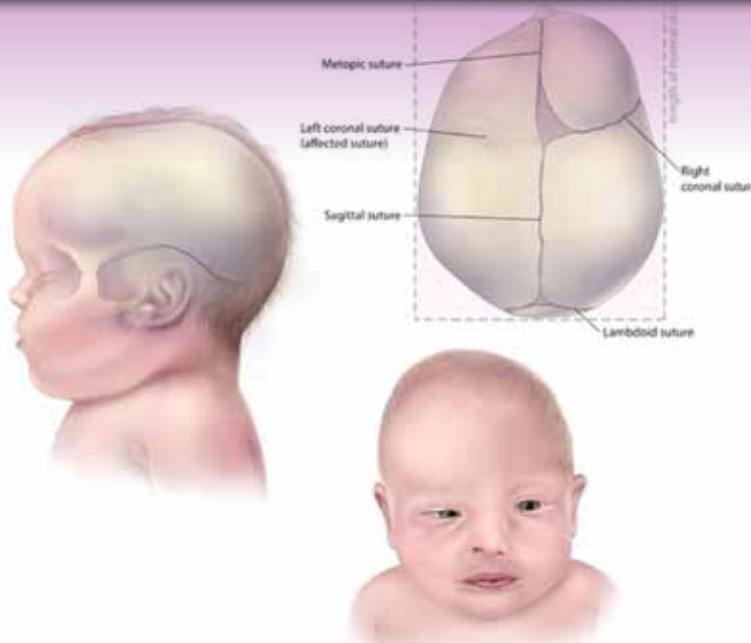
Maintaining a healthy weight also helps reduce the risk of complications during pregnancy. Women with pre-existing conditions, such as diabetes, should take special care to manage their health.

It's extremely important to attend regular prenatal appointments. If your pregnancy is considered high risk, your doctor can do additional prenatal screening to identify defects. Depending on the type of defect, your doctor may be able to treat it before the baby is born.

Genetic counseling

A genetic counselor can advise couples with family histories of a defect or other risks factors for birth defects. A counselor may be helpful when you're thinking about having children or already expecting. Genetic counselors can determine the likelihood that your baby will be born with defects by evaluating family history and medical records. They may also order tests to analyze the genes of the mother, father, and baby.

source: www.healthline.com



FDA warns that biotin may interfere with lab tests

In November, FDA published a safety communication alerting health professionals, laboratory professionals, and patients that biotin (vitamin B7) may interfere with certain lab tests and cause falsely high or low results.¹

The inaccurate results may lead to misdiagnosis or inappropriate treatment, FDA said, adding that the agency "has seen an increase in the number of reported adverse events, including one death, related to biotin interference with lab tests."

Biotin is often marketed as a beauty supplement for hair, skin, and nails, and some physicians recommend high doses of biotin as part of treatment for conditions like multiple sclerosis. FDA cautioned that some supplements contain up to 650 times the recommended dose of the vitamin and recommended that health professionals who collect samples for lab tests ask whether the patient is taking biotin.

The dangers of interference

The death reported to the FDA came after a patient received a test for troponin, a biomarker that helps clinicians diagnose heart attacks, and the results were falsely low. Troponin rises after injury to heart muscle. "

This is an important issue because the troponin test is a highly sensitive assay for cardiac tissue and an established bedrock for whether someone has ischemia of myocardial tissue. If the test is negative, we usually feel reassured that the patient is not having a cardiac ischemic event, but if something is interfering with the results and providing false lows, that could have a huge impact for hospital admissions and monitoring," said Steven Dunn, PharmD, BCPS, pharmacy clinical coordinator in cardiology at the University of Virginia Health System in Charlottesville.

High levels of biotin have also been shown to interfere with tests for thyroid hormones, and several cases have been reported in the medical literature of patients being misdiagnosed and treated for Graves disease they didn't actually have.²⁻⁴ "

This should provide a bit of caution for the medical community as well, because the therapies [for Graves] can cause a number of toxicities and would likely cause hypothyroidism in a patient who had a normally functioning thyroid," Dunn said.

Community pharmacy conundrum

Community pharmacists are in an excellent position to discuss biotin with patients—if patients bring their biotin purchase to the pharmacy counter and not to the checkout counter in the front of the store, Dunn said. "

Pharmacists should be aware of what the evidence-based medicine involving biotin is

and understand that there really isn't good evidence for using [high doses] in patients," said Dunn. "The problem is that biotin is OTC, and the pharmacist may not be able to cross-reference the purchase with the person's medical record to provide a specific recommendation when it may not be clear what they are seeking biotin for."

Pharmacists who do encounter patients who seek to purchase biotin supplements should be prepared to take advantage of a teachable moment, Dunn added. "

Many people who take highdose supplements have a perception that the body will get rid of what it doesn't need, but there's a lot we don't know about the role

these compounds play at 100 to 1,000% of their recommended dose," Dunn said. "We have a responsibility to relay information to patients, promote what the best practice is, and increase awareness of the potential dangers."

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Terri D'Arrigo, reporter



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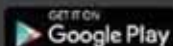
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WHAT ARE CONGENITAL HEART DEFECTS?

Congenital heart defects (CHDs) are the most common type of birth defect. As medical care and treatment have advanced, babies with a CHD are living longer and healthier lives. Learn more facts about CHDs below.

What are Congenital Heart Defects (CHDs)?

CHDs are present at birth and can affect the structure of a baby's heart and the way it works. They can affect how blood flows through the heart and out to the rest of the body. CHDs can vary from mild (such as a small hole in the heart) to severe (such as missing or poorly formed parts of the heart).

About 1 in 4 babies born with a

heart defect has a critical CHD (also known as critical congenital heart defect).¹ Babies with a critical CHD need surgery or other procedures in the first year of life.

Types

Listed below are examples of different types of CHDs. The types marked with a star (*) are considered critical CHDs.

- Atrial Septal Defect
- Atrioventricular Septal Defect
- Coarctation of the Aorta*
- Double-outlet Right Ventricle*
- d-Transposition of the Great Arteries*
- Ebstein Anomaly*
- Hypoplastic Left Heart Syndrome*
- Interrupted Aortic Arch*

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DENTAL AND ORAL HEALTH

OVERVIEW

Dental and oral health is an essential part of your overall health and well-being. Poor oral hygiene can lead to dental cavities and gum disease, and has also been linked to heart disease, cancer, and diabetes.

Maintaining healthy teeth and gums is a lifelong commitment. The earlier you learn proper oral hygiene habits — such as brushing, flossing, and limiting your sugar intake — the easier it'll be to avoid costly dental procedures and long-term health issues.

FACTS ABOUT DENTAL AND ORAL HEALTH

Dental cavities and gum disease are very common. According to the World Health Organization:

- between 60 and 90 percent of school children have at least one dental cavity
- nearly 100 percent of adults have at least one dental cavity
- between 15 and 20 percent of adults ages 35 to 44 have severe gum disease
- about 30 percent of people around the world ages 65 to 74 don't have any natural teeth left
- in most countries, out of every 100,000 people, there are between 1 and 10 cases of oral cancer
- the burden of oral disease is much higher in poor or disadvantaged population groups

There are many steps you can take to keep your teeth healthy. For example, dental and oral disease can be greatly reduced by:

- brushing your teeth with fluoride toothpaste at least twice a day
- flossing your teeth at least once a day
- decreasing your intake of sugar
- eating a diet high in fruits and vegetables
- avoiding tobacco products
- drinking fluoridated water
- seeking professional dental care

SYMPTOMS OF DENTAL AND ORAL PROBLEMS

You shouldn't wait until you have symptoms to visit your dentist. Going to the dentist twice a year will usually allow them to catch a problem before you even notice any symptoms.

If you experience any of the following warning signs of dental health issues, you should make an appointment to see your dentist as soon as possible:

- ulcers, sores, or tender areas in the mouth that won't heal after

- a week or two
- bleeding or swollen gums after brushing or flossing
- chronic bad breath
- sudden sensitivity to hot and cold temperatures or beverages
- pain or toothache
- loose teeth
- receding gums
- pain with chewing or biting
- swelling of the face and cheek
- clicking of the jaw
- cracked or broken teeth
- frequent dry mouth

CAUSES OF DENTAL AND ORAL DISEASES

Your oral cavity collects all sorts of bacteria, viruses, and fungi. Some of them belong there, making up the normal flora of your mouth. They're generally harmless in small quantities. But a diet high in sugar creates conditions in which acid-producing bacteria can flourish. This acid dissolves tooth enamel and causes dental cavities.

Bacteria near your gumline thrive in a sticky matrix called plaque. Plaque accumulates, hardens, and migrates down the length of your tooth if it isn't removed regularly by brushing and flossing. This can inflame your gums and cause the condition known as gingivitis.

Increased inflammation causes your gums to begin to pull away from your teeth. This process creates pockets in which pus may eventually collect. This more advanced stage of gum disease is called periodontitis.

There are many factors that contribute to gingivitis and periodontitis, including:

- smoking
- poor brushing habits
- frequent snacking on sugary foods and drinks
- diabetes
- the use of medications that reduce the amount of saliva in the mouth
- family history, or genetics
- certain infections, such as HIV or AIDS
- hormonal changes in women
- acid reflux, or heartburn
- frequent vomiting, due to the acid

DIAGNOSING DENTAL AND ORAL DISEASES

Most dental and oral problems can be diagnosed during a dental exam. During an exam, your dentist will closely inspect your:

- teeth
- mouth
- throat
- tongue

- cheeks
- jaw
- neck

Your dentist might tap or scrape at your teeth with various tools or instruments to assist with a diagnosis. A technician at the dentist's office will take dental X-rays of your mouth, making sure to get an image of each of your teeth. Be sure to tell your dentist if you're pregnant. Women who are pregnant shouldn't have X-rays.

A tool called a probe can be used to measure your gum pockets. This small ruler can tell your dentist whether or not you have gum disease or receding gums. In a healthy mouth, the depth of the pockets between the teeth are usually between 1 and 3 millimeters (mm). Any measurement higher than that may mean you have gum disease.

If your dentist finds any abnormal lumps, lesions, or growths in your mouth, they may perform a gum biopsy. During a biopsy, a small piece of tissue is removed from the growth or lesion. The sample is then sent to a laboratory for examination under a microscope to check for cancerous cells.

If oral cancer is suspected, your dentist may also order imaging tests to see if the cancer has spread. Tests may include:

- X-ray
- MRI scan
- CT scan
- endoscopy

TYPES OF DENTAL AND ORAL DISEASES

We use our teeth and mouths for a lot, so it's not surprising how many things can go wrong over time, especially if you don't take proper care of your teeth. Most dental and oral problems can be prevented with proper oral hygiene. You'll likely experience at least one dental problem during your lifetime.

Cavities

Cavities are also called caries or tooth decay. These are areas of the tooth that have been permanently damaged and may even have holes in them. Cavities are fairly common. They occur when bacteria, food, and acid coat your teeth and form a plaque. The acid on your teeth starts to eat away at the enamel and then the underlying dentin, or connective tissue. Over time, this can lead to permanent damage.

Gum disease (gingivitis)

Gum disease, also called gingivitis,

is inflammation of the gums. It's usually the result of plaque building up on your teeth due to poor brushing and flossing habits. Gingivitis can make your gums swell and bleed when you brush or floss. Untreated gingivitis can lead to periodontitis, a more serious infection.

Periodontitis

As periodontitis progresses, the infection can spread to your jaw and bones. It can also cause an inflammatory response throughout the body.

Cracked or broken teeth

A tooth can crack or break from an injury to the mouth, chewing hard foods, or grinding the teeth at night. A cracked tooth can be very painful. You should visit your dentist right away if you've cracked or broken a tooth.

Sensitive teeth

If your teeth are sensitive, you might feel pain or discomfort after having cold or hot foods or beverages.

Tooth sensitivity is also referred to as "dentin hypersensitivity." It sometimes occurs temporarily after having a root canal or a filling. It can also be the result of:

- gum disease
- receding gums
- a cracked tooth
- worn-down fillings or crowns

Some people naturally have sensitive teeth because they have thinner enamel.

Most of the time, naturally sensitive teeth can be treated with a change in your daily oral hygiene regimen. There are specific brands of toothpaste and mouthwash for people with sensitive teeth.

Shop for toothpaste and mouthwash made for people with sensitive teeth.

ORAL CANCER

Oral cancers include cancer of the:

- gums
- tongue
- lips
- cheek
- floor of the mouth
- hard and soft palate

A dentist is usually the first person to recognize oral cancer. Tobacco use, such as smoking and chewing tobacco, is the biggest risk factor for oral cancer.

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FROM PAGE 09

The earlier that oral cancer is diagnosed, the better the outlook.

THE LINK BETWEEN ORAL AND GENERAL HEALTH

Oral health has risen in importance in recent years, as researchers have discovered a connection between declining oral health and underlying systemic conditions. It turns out that a healthy mouth can help you maintain a healthy body. According to the Mayo Clinic, oral bacteria and inflammation may be associated with:

- heart disease
- endocarditis, or inflammation of the lining of the heart
- premature birth
- low birth weight

Bacteria can spread from your oral cavity to your bloodstream, causing infective endocarditis. Infective endocarditis is a life-threatening infection of your heart valves. Your dentist may suggest you take antibiotics as a preventive measure before they perform any dental procedure that could dislodge bacteria in your mouth.

TREATING DENTAL AND ORAL PROBLEMS

Even if you've been taking good care of your teeth, you'll still need to have a professional cleaning twice a year during a routine visit with your dentist. Your dentist will recommend other treatments if you show signs of gum disease, infections, or other problems.

Cleanings

A professional cleaning can get rid of any plaque you may have missed while brushing and flossing. It'll also remove tartar. These cleanings are usually performed by a dental hygienist. After all the tartar is removed from your teeth, the hygienist will use a high-powered toothbrush to brush your teeth. This is followed by flossing and rinsing to wash out any

debris.

A deep cleaning is also known as scaling and root planning. It removes tartar from above and below the gumline that can't be reached during a routine cleaning.

Fluoride treatments

Following a dental cleaning, your dentist may apply a fluoride treatment to help fight off cavities. Fluoride is a naturally occurring mineral. It can help strengthen the enamel of your tooth and make them more resilient to bacteria and acid.

Antibiotics

If you show signs of a gum infection or you have a tooth abscess that has spread to other teeth or your jaw, your dentist may prescribe antibiotics to help get rid of the infection. The antibiotic may be in the form of a mouth rinse, gel, oral tablet, or capsule. Topical antibiotic gel may also be applied to the teeth or gums during surgical procedures.

Fillings, crowns, and sealants

A filling is used to repair a cavity, crack, or hole in the tooth. The dentist will first use a drill to remove the damaged area of the tooth and then fill the hole with some material, such as amalgam or composite.

A crown is used if a large portion of your tooth needs to be removed or has broken off due to an injury. There are two types of crowns: an implant crown that fits over an implant, and a regular crown that fits over a natural tooth. Both types of crowns fill in the gap where your natural tooth appeared.

Dental sealants are thin, protective coatings that are placed on the back teeth, or molars, to help prevent cavities. Your dentist may recommend a sealant for your children as soon as they get their first molars, at around age six, and again when they get their second set of molars around age 12.

Sealants are easy to apply and completely painless.

Root canal

You might need a root canal if tooth decay reaches all the way inside the tooth to the nerve. During a root canal, the nerve is removed and replaced with a filling made of a biocompatible material, usually a combination of a rubber-like material called gutta-percha and adhesive cement.

Probiotics

Probiotics are mostly known for their role in digestive health, but new research has shown that the healthy bacteria may be beneficial for your teeth and gums.

Probiotics have been shown to prevent plaque and treat bad breath. They also help to prevent oral cancers and decrease inflammation from gum disease.

While large clinical trials are still needed to prove their effectiveness, results to date have been promising. You can take a probiotic supplement or eat foods high in beneficial bacteria, such as yogurt, kefir, and kimchi. Other popular probiotic foods include sauerkraut, tempeh, and miso.

Changing daily habits

Keeping your mouth healthy is a daily commitment. A dental hygienist can teach you how to properly take care of your teeth and gums on a daily basis. In addition to brushing and flossing, your daily routine can include mouthwash, oral rinses, and possibly other tools, such as a Waterpik water flosser.

SURGERY FOR DENTAL AND ORAL PROBLEMS

Oral surgeries are usually performed to treat more serious cases of periodontal disease. Certain dental surgeries can also be done to replace or fix missing or broken teeth caused by an accident.

Flap surgery

During a flap surgery, a surgeon makes a small

cut in the gum to lift up a section of the tissue. They then remove tartar and bacteria from underneath the gums. The flap is then stitched back into place around your teeth.

Bone grafting

Bone grafting is needed when gum disease causes damage to the bone surrounding the root of your tooth. The dentist replaces the damaged bone with a graft, which can be made from your own bone, a synthetic bone, or a donated bone.

Soft tissue grafts

A soft tissue graft is used to treat receding gums. A dentist will remove a small piece of tissue from your mouth or use a donor tissue and attach it to the areas of your gums that are missing.

Tooth extraction

If your dentist can't save your tooth with a root canal or other surgery, the tooth will likely need to be extracted.

You may also need a tooth extraction if your wisdom teeth, or third molars, are impacted. Sometimes, a person's jaw isn't large enough to accommodate the third set of molars. One or more of the wisdom teeth will become trapped or impacted when it tries to emerge. A dentist will typically recommend that wisdom teeth be extracted if they cause pain, inflammation, or other problems.

Dental implants

Dental implants are used to replace missing teeth that are lost due to a disease or an accident. An implant is surgically placed into the jawbone. After the implant is placed, your bones will grow around it. This is called osseointegration.

Once this process is complete, your dentist will customize a new artificial tooth for you that matches your other teeth. This artificial tooth is known as a crown. The new crown is then attached to the

implant. If you're replacing more than one tooth, your dentist may customize a bridge to fit into your mouth. A dental bridge is made of two abutment crowns on either side of the gap, which then hold the artificial teeth in between in place.

WHAT CAN GO WRONG?

Periodontal disease can eventually break down the bone that supports your teeth. This can lead to many complications. You'll likely need dental treatment to save your teeth.

Risks and complications of untreated periodontal disease include:

- tooth abscesses
- other infections
- migration of your teeth
- pregnancy complications
- exposure of the roots of your teeth
- oral cancer
- tooth loss
- increased risk of diabetes, heart disease, cancer, and respiratory diseases

If left untreated, an infection from a tooth abscess can spread to other parts of your head or neck. It can even lead to sepsis, a life-threatening blood infection.

KEEPING YOUR TEETH AND GUMS HEALTHY

Good oral health boils down to good general health and common sense. The best ways to prevent oral health problems are to:

- brush your teeth with fluoride toothpaste at least twice a day
- floss at least once a day (one of the most beneficial things you can do to prevent disease in your oral cavity)
- have your teeth cleaned by a dental professional every six months
- avoid tobacco products
- follow a high-fiber, low-fat, low-sugar diet that includes plenty of fruits and vegetables
- limit sugary snacks and drinks

Foods with hidden sugars include:

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ORAL HEALTH

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- condiments such as ketchup and barbecue sauce
- sliced fruit or applesauce in cans or jars that have added sugars
- flavored yogurt
- pasta sauce
- sweetened iced tea
- soda
- sports drinks
- juice or juice blends
- granola and cereal bars
- muffins

Get more tips on preventing oral health problems. Good oral health is especially important to groups such as children, pregnant women, and older adults.

WHAT YOU SHOULD KNOW ABOUT YOUR CHILD'S ORAL HEALTH

Children are highly susceptible to dental cavities and tooth decay, especially those who bottle feed. Cavities may be caused by too much sugar left on the teeth after bottle feeding.

To avoid baby bottle tooth decay, you should do the following:

- only bottle feed during meal times
- wean your child off of a bottle by the time they're one year old
- fill the bottle with water if you must give them a bottle at bedtime
- begin brushing with a soft baby toothbrush once their baby teeth start to come in; you should use only water until your child learns not to swallow the toothpaste
- start seeing a pediatric dentist regularly for your child
- ask your child's dentist about dental sealants

WHAT MEN NEED TO KNOW ABOUT ORAL HEALTH

According to the American Academy of Periodontology, men

are less likely to take good care of their teeth and gums than women. Compared to women, men are less likely to brush twice per day, floss regularly, and seek preventive dental care.

Oral and throat cancer is more common in men. A 2008 study showed that men with a history of periodontal disease are 14 percent more likely to develop other types of cancer than men with healthy gums. It's important that men recognize the consequences of poor oral health and take action early in life.

WHAT WOMEN NEED TO KNOW ABOUT ORAL HEALTH

Due to changing hormones at various stages of their lives, women are at risk for several oral health issues.

When a woman first starts menstruating, she may experience mouth sores or swollen gums during her periods.

During pregnancy, increased hormones can affect the amount of saliva produced by the mouth. Frequent vomiting caused by morning sickness can result in tooth decay. You can receive dental care during pregnancy, but you should let your dentist know if you're pregnant.

During menopause, lower amounts of estrogen can increase your risk of gum disease. Some women may also experience a condition called burning mouth syndrome (BMS) during menopause. Learn about the different dental issues that women face throughout their lives.

WHAT PEOPLE WITH DIABETES NEED TO KNOW ABOUT ORAL HEALTH

Diabetes affects the body's ability

WHAT PROBLEMS COULD POOR DENTAL HEALTH CAUSE?



to fight off bacteria. This means that people with diabetes have a higher risk of having oral infections, gum disease, and periodontitis. They're at an increased risk of an oral fungal infection called thrush.

For people with diabetes to take charge of their oral health, they'll need to maintain control over their blood sugar levels. This is on top of brushing, flossing, and dentist's visits. Explore the link between type 2 diabetes and oral health.

THE BOTTOM LINE ABOUT DENTAL AND ORAL HEALTH

Your oral health has an effect on more than just your teeth. Poor oral

and dental health can contribute to issues with your self-esteem, speech, or nutrition. They can also affect your comfort and overall quality of life. Many dental and oral problems develop without any symptoms. Seeing a dentist regularly for a checkup and exam is the best way to catch a problem before it gets worse.

Ultimately, your long-term outcome depends on your own efforts. You can't always prevent every cavity, but you can reduce your risk of severe gum disease and tooth loss by staying on top of your daily oral care.

Source: www.healthline.com

WHAT ARE CONGENITAL HEART DEFECTS?

FROM PAGE 08

- Pulmonary Atresia*
- Single Ventricle*
- Tetralogy of Fallot*
- Total Anomalous Pulmonary
- Venous Return*
- Tricuspid Atresia*
- Truncus Arteriosus*
- Ventricular Septal Defect

Signs and Symptoms

Signs and symptoms for CHDs

depend on the type and severity of the particular defect. Some defects might have few or no signs or symptoms. Others might cause a baby to have the following symptoms:

- Blue-tinted nails or lips
- Fast or troubled breathing
- Tiredness when feeding
- Sleepiness

Diagnosis

Some CHDs may be diagnosed

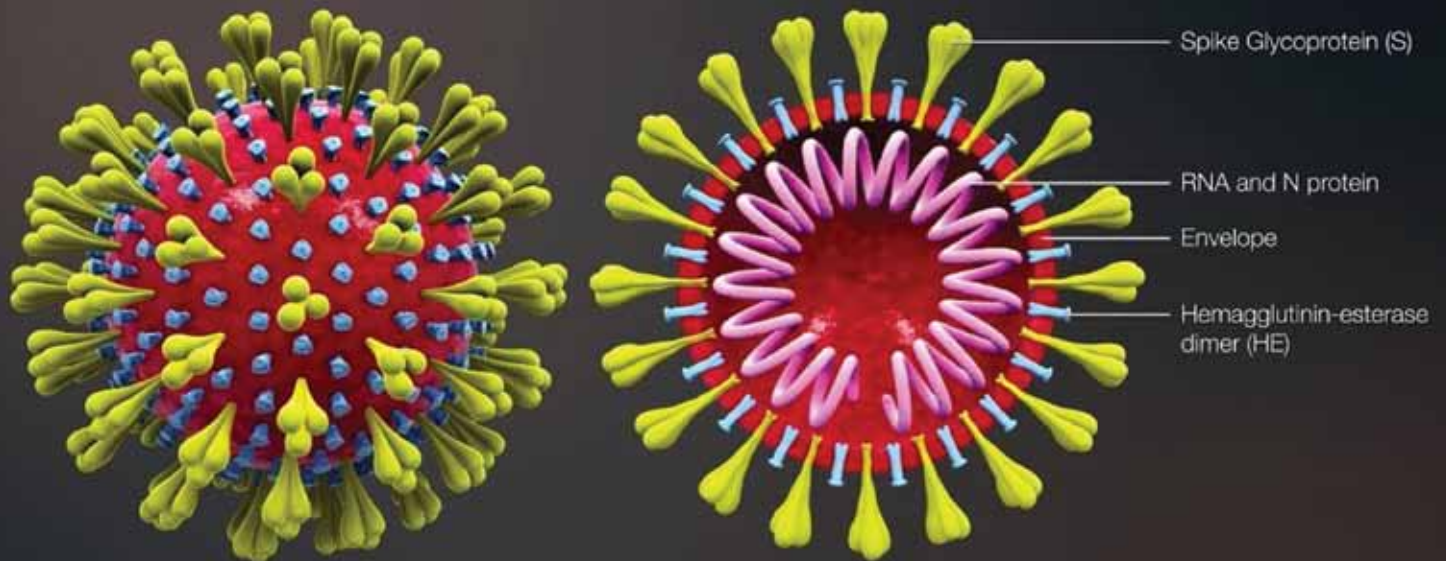
during pregnancy using a special type of ultrasound called a fetal echocardiogram, which creates ultrasound pictures of the heart of the developing baby. However, some CHDs are not detected until after birth or later in life, during childhood or adulthood. If a healthcare provider suspects a CHD may be present, the baby can get several tests (such as an echocardiogram) to confirm the diagnosis.

Treatment

Treatment for CHDs depends on the type and severity of the defect present. Some affected infants and children might need one or more surgeries to repair the heart or blood vessels. Some can be treated without surgery using a procedure called cardiac catheterization. A long tube, called a catheter, is threaded through the blood vessels

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2019-nCoV aka SARS-CoV-2



this virus causes the disease **COVID-19**

COMMON QUESTIONS ABOUT THE NEW CORONA VIRUS DISEASE COVID-19

What is a coronavirus?

Coronaviruses are a large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections ranging from the

common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19.

What is COVID-19?

COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019

What are the symptoms of COVID-19?

The most common symptoms of COVID-19 are fever, tiredness, and dry cough. Some patients may have aches and pains, nasal congestion, runny

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WHAT ARE CONGENITAL HEART DEFECTS?

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into the heart, where a doctor can take measurements and pictures, do tests, or repair the problem. Sometimes the heart defect can't be fully repaired, but these procedures can improve blood flow and the way the heart works. It is important to note that even if their heart defect has been repaired, many people with CHDs are not cured.

Causes

The causes of CHDs among most babies are unknown. Some babies have heart defects because of changes in their individual genes or chromosomes. CHDs also

are thought to be caused by a combination of genes and other factors, such as things in the environment, the mother's diet, the mother's health conditions, or the mother's medication use during pregnancy. For example, certain conditions a mother has, like pre-existing diabetes or obesity, have been linked to heart defects in the baby.^{2,3} Smoking during pregnancy as well as taking certain medications have also been linked to heart defects.^{2,3}

Living with a CHD

As medical care and treatment have advanced, infants with CHDs are living longer and healthier lives. Many children with CHDs are now

living into adulthood. It is estimated that more than two million individuals in the United States are living with a CHD. Many people with a CHD lead independent lives with little or no difficulty. Others might develop disability over time. Some people with a CHD have genetic problems or other health conditions that increase their risk for disability.

Even with improved treatments, many people with a CHD are not cured, even if their heart defect has been repaired. People with a CHD can develop other health problems over time, depending on their specific heart defect, the number of heart defects they have, and the severity of their

heart defect. For example, some other health problems that might develop include irregular heart beat (arrhythmias), increased risk of infection in the heart muscle (infective endocarditis), or weakness in the heart (cardiomyopathy). People with a CHD need routine checkups with a cardiologist (heart doctor) to stay as healthy as possible. They also might need further operations after initial childhood surgeries. It is important for people with a CHD to visit their doctor on a regular basis and discuss their health, including their specific heart condition, with their doctor.

Source: www.cdc.gov

nose, sore throat or diarrhoea. These symptoms are usually mild and begin gradually. Some people become infected but don't develop any symptoms and don't feel unwell. Most people (about 80%) recover from the disease without needing special treatment. Around 1 out of every 6 people who gets COVID-19 becomes seriously ill and develops difficulty breathing. Older people, and those with underlying medical problems like high blood pressure, heart problems or diabetes, are more likely to develop serious illness. About 2% of people with the disease have died. People with fever, cough and difficulty breathing should seek medical attention.

How does COVID-19 spread?

People can catch COVID-19 from others who have the virus. The disease can spread from person to person through small droplets from the nose or mouth which are spread when a person with COVID-19 coughs or exhales. These droplets land on objects and surfaces around the person. Other people then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth. People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets. This is why it is important to stay more than 1 meter (3 feet) away from a person who is sick.

WHO is assessing ongoing research on the ways COVID-19 is spread and will continue to share updated findings.

Can the virus that causes COVID-19 be transmitted through the air?

Studies to date suggest that the virus that causes COVID-19 is mainly transmitted through contact with respiratory droplets rather than through the air. See previous answer on "How does COVID-19 spread?"

Can COVID-19 be caught from a person who has no symptoms?

The main way the disease

spreads is through respiratory droplets expelled by someone who is coughing. The risk of catching COVID-19 from someone with no symptoms at all is very low. However, many people with COVID-19 experience only mild symptoms. This is particularly true at the early stages of the disease. It is therefore possible to catch COVID-19 from someone who has, for example, just a mild cough and does not feel ill. WHO is assessing ongoing research on the period of transmission of COVID-19 and will continue to share updated findings.

Can I catch COVID-19 from the faeces of someone with the disease?

The risk of catching COVID-19 from the faeces of an infected person appears to be low. While initial investigations suggest the virus may be present in faeces in some cases, spread through this route is not a main feature of the outbreak. WHO is assessing ongoing research on the ways COVID-19 is spread and will continue to share new findings. Because this is a risk, however, it is another reason to clean hands regularly, after using the bathroom and before eating.

Protection measures for everyone

Stay aware of the latest information on the COVID-19 outbreak, available on the WHO website and through your national and local public health authority. COVID-19 is still affecting mostly people in China with some outbreaks in other countries. Most people who become infected experience mild illness and recover, but it can be more severe for others. Take care of your health and protect others by doing the following:

- Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water.

Why? Washing your hands with soap and water or using

alcohol-based hand rub kills viruses that may be on your hands.

- Maintain at least 1 metre (3 feet) distance between yourself and anyone who is coughing or sneezing.

Why? When someone coughs or sneezes, they spray small liquid droplets from their nose or mouth which may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person coughing has the disease.

- Avoid touching eyes, nose and mouth.

Why? Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and can make you sick.

- Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately.

Why? Droplets spread virus. By following good respiratory hygiene, you protect the people around you from viruses such as cold, flu and COVID-19.

- Stay home if you feel unwell. If you have a fever, cough and difficulty breathing, seek medical attention and call in advance. Follow the directions of your local health authority.

Why? National and local authorities will have the most up to date information on the situation in your area. Calling in advance will allow your health care provider to quickly direct you to the right health facility. This will also protect you and help prevent

spread of viruses and other infections.

- Stay informed on the latest developments about COVID-19. Follow advice given by your healthcare provider, your national and local public health authority or your employer on how to protect yourself and others from COVID-19.

Why? National and local authorities will have the most up to date information on whether COVID-19 is spreading in your area. They are best placed to advise on what people in your area should be doing to protect themselves.

Protection measures for persons who are in or have recently visited (past 14 days) areas where COVID-19 is spreading

- Follow the guidance outlined above. (Protection measures for everyone)
- Stay at home if you begin to feel unwell, even with mild symptoms such as headache and slight runny nose, until you recover.

Why? Avoiding contact with others and visits to medical facilities will allow these facilities to operate more effectively and help protect you and others from possible COVID-19 and other viruses.

- If you develop fever, cough and difficulty breathing, seek medical advice promptly as this may be due to a respiratory infection or other serious condition. Call in advance and tell your provider of any recent travel or contact with travellers.

Why? Calling in advance will allow your health care provider to quickly direct you to the right health facility. This will also help to prevent possible spread of COVID-19 and other viruses.

Source: <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>



BENEFITS OF EXERCISE

REGULAR EXERCISE AND PHYSICAL ACTIVITY MAY

- **Help you control your weight.** Along with diet, exercise plays an important role in controlling your weight and preventing obesity. To maintain your weight, the calories you eat and drink must equal the energy you burn. To lose weight, you must use more calories than you eat and drink.
- **Reduce your risk of heart diseases.** Exercise strengthens your heart and improves your circulation. The increased blood flow raises the oxygen levels in your body. This helps lower your risk of heart diseases such as high cholesterol, coronary artery disease, and heart attack. Regular exercise can also lower your blood pressure and triglyceride levels.
- **Help your body manage blood sugar and insulin levels.** Exercise can lower your blood sugar level and help your insulin work better. This can cut down your risk for metabolic syndrome and type 2 diabetes. And if you already have one of those diseases, exercise can help you to manage it.

- **Help you quit smoking.** Exercise may make it easier to quit smoking by reducing your cravings and withdrawal symptoms. It can also help limit the weight you might gain when you stop smoking.
- **Improve your mental health and mood.** During exercise, your body releases chemicals that can improve your mood and make you feel more relaxed. This can help you deal with stress and reduce your risk of depression.
- **Help keep your thinking, learning, and judgment skills sharp as you age.** Exercise stimulates your body to release proteins and other chemicals that improve the structure and function of your brain.
- **Strengthen your bones and muscles.** Regular exercise can help kids and teens build strong bones. Later in life, it can also slow the loss of bone density that comes with age. Doing muscle-strengthening activities can help you increase or maintain your muscle mass and strength.
- **Reduce your risk of some cancers,** including colon, breast, uterine, and lung cancer.
- **Reduce your risk of falls.** For older adults, research shows that doing balance and muscle-strengthening activities in addition to moderate-intensity aerobic activity can help reduce your risk of falling.
- **Improve your sleep.** Exercise can help you to fall asleep faster and stay asleep longer.
- **Improve your sexual health.** Regular exercise may lower the risk of erectile dysfunction (ED) in men. For those who already have ED, exercise may help improve their sexual function. In women, exercise may increase sexual arousal.
- **Increase your chances of living longer.** Studies show that physical activity can reduce your risk of dying early from the leading causes of death, like heart disease and some cancers.

HOW CAN I MAKE EXERCISE A PART OF MY REGULAR ROUTINE?

- **Make everyday activities more active.** Even small changes can help. You can take the stairs instead of the elevator. Walk down the hall to a coworker's office instead of sending an email. Wash the car yourself. Park further away from your destination.
- **Be active with friends and family.** Having a workout partner may make

you more likely to enjoy exercise. You can also plan social activities that involve exercise. You might also consider joining an exercise group or class, such as a dance class, hiking club, or volleyball team.

- **Keep track of your progress.** Keeping a log of your activity or using a fitness tracker may help you set goals and stay motivated.
- **Make exercise more fun.** Try listening to music or watching TV while you exercise. Also, mix things up a little bit - if you stick with just one type of exercise, you might get bored. Try doing a combination of activities.
- **Find activities that you can do even when the weather is bad.** You can walk in a mall, climb stairs, or work out in a gym even if the weather stops you from exercising outside.

Source: medlineplus.gov

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