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[Dr. Gaynes] Welcome to *A Cup of Health with CDC*, a weekly feature of the *MMWR*, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Robert Gaynes.

Most babies appear to be healthy when they're born. However, some of the most serious problems aren't always visible. Congenital heart defects are conditions that affect the structure and function of an infant's heart.

Dr. Tiffany Colarusso is a pediatrician with CDC's National Center on Birth Defects and Developmental Disabilities. She's joining us today to discuss ways to prevent congenital heart defects in newborns. Welcome to the show, Tiffany.

[Dr. Colarusso] Thank you

[Dr. Gaynes] Tiffany, what are congenital heart defects and how common are they?

[Dr. Colarusso] Well congenital heart defects are conditions that are present at birth that affect the structure and function of the heart, that is, how the heart is developed or formed. Now there are actually several types of heart defects. Some are rather simple and usually don't cause many problems, such as a small hole in the heart, and others are much more serious, such as missing an entire portion of the heart. Now, CHDs, or congenital heart defects, are the most common type of birth defect and affect nearly one percent of newborns in the United States. So to put that in perspective, approximately 40,000 births each year are affected and it actually is a leading cause of infant mortality.

[Dr. Gaynes] Are there any signs or symptoms that would indicate the possibility of a congenital heart defect in a newborn?

[Dr. Colarusso] Well, it really depends on the type and the severity of the heart defect that's present. So many may have few or actually no symptoms at all. There are signs and symptoms that may be present that include a bluish tint in the lips or nails, a fast or troubled breathing, maybe tiring easily when the baby is eating, or being very sleepy. But basically if a parent or a caregiver thinks that something just doesn't seem quite right with the baby, they should definitely bring the baby to the nearest health care provider for an evaluation.

[Dr. Gaynes] Tiffany what causes heart defects?

[Dr. Colarusso] Well the cause of most heart defects really is unknown, so genes may be a factor. For example, heart defects are more often present with some genetic syndromes, such as Down syndrome. But likely there is really an interaction or a combination affect between genes and exposure that occurs during pregnancy, such as smoking. So we've found that maternal obesity, diabetes, and smoking can increase the likelihood that a child may be born with a heart defect.

[Dr. Gaynes] So what can a pregnant woman do to decrease the risk of a heart defect in her newborn?

[Dr. Colarusso] Well, it's important to remember that many structures in the baby, including the heart, are actually formed before the woman even realizes that they are pregnant. So therefore, we really encourage all women of childbearing age to have a healthy lifestyle. Now, specifically, all women who are thinking of becoming pregnant should really maintain a healthy weight, control diagnosed diabetes, and quit smoking to decrease the chance of having a baby with a heart defect.

[Dr. Gaynes] How is a congenital heart defect detected?

[Dr. Colarusso] Well, some heart defects can be detected during pregnancy, but usually heart defects are diagnosed at birth or shortly afterwards. However, even some defects are not found until a child is much older. Basically, if a health care provider suspects a heart defect may be present, the baby can undergo several tests, such as blood tests, x-rays, and most importantly an ultrasound picture of the heart, which is called an echocardiogram.

[Dr. Gaynes] How is a heart defect treated?

[Dr. Colarusso] Well again, it really depends on the type and severity of the heart defect. There are several different things that can be done. Actually, some get better, even by themselves, but others may need one or more surgeries to repair the heart or the blood vessels, and many can actually be treated without surgery during a procedure called a catheterization, where a long tube is put into the blood vessel and then threaded to the heart and the doctor can do tests or even fix the problem at that time, without surgery. And with the success of medical treatments and therapies, many people are living, treated, with heart defects, into adulthood. There are actually almost two million people in the United States with heart defects, both children and adults. So it's important for people with congenital heart defects to have lifelong specialized care in order to monitor if they develop other problems and so that they can live longer and healthier lives.

[Dr. Gaynes] Tiffany, where can listeners get more information about congenital heart defects?

[Dr. Colarusso] They can go to <a href="www.cdc.gov">www.cdc.gov</a> and type in the term "heart defects" into the search box.

[Dr. Gaynes] Thanks, Tiffany. I've been talking today with CDC's Dr. Tiffany Colarusso about congenital heart defects in newborns.

Maternal obesity, diabetes, and smoking can increase the chance that a child is born with a heart defect. If you're pregnant or of childbearing age, quit smoking and maintain a healthy weight. If you have diabetes, make sure it's under control.

Until next time, be well. This is Dr. Robert Gaynes for A Cup of Health with CDC.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.