



American Heart Association®

Cardiovascular-Kidney-Metabolic
Health Initiative™



Cardiovascular-Kidney-Metabolic Syndrome (CKM Syndrome) Guide

A Patient's Resource to Understanding the 2026
Cardiovascular-Kidney-Metabolic Syndrome Clinical Practice Guideline

heart.org/myckmhealth

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What Is Cardiovascular-Kidney-Metabolic Syndrome (CKM Syndrome)?

CKM stands for the Cardiovascular (heart and blood vessels), Kidney and Metabolic systems. The metabolic system is how the body creates, stores and uses energy. Together, these three systems are closely connected and often affect each other. The CKM health approach means taking care of all three together, instead of treating each system separately.

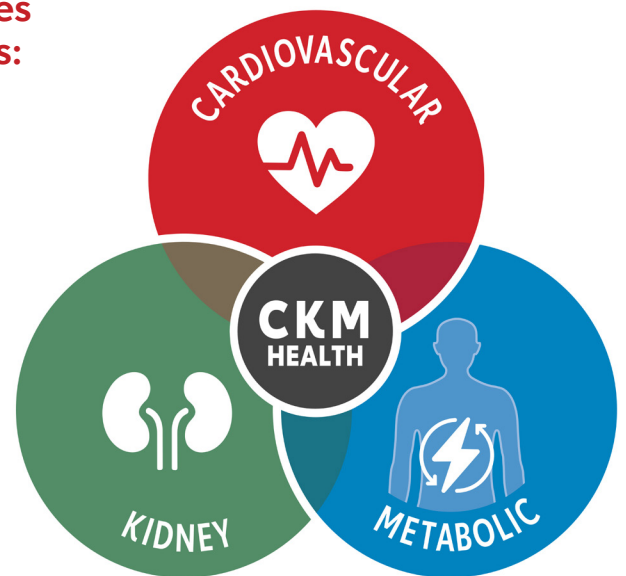
Why is it important to focus on CKM health?

When one or more CKM systems do not work well (poor CKM health), a condition called CKM syndrome can develop. CKM syndrome refers to several health conditions that are connected — heart disease, stroke, kidney disease, obesity and diabetes.

These connections mean that heart disease risk goes beyond the heart. Understanding that everything in your body is connected helps you and your healthcare team think about your overall health beyond individual conditions.

As CKM syndrome progresses, risk increases for more serious health conditions, such as:

- Pre-heart failure/Heart failure
- Heart attack
- Stroke
- Kidney disease, which may lead to kidney failure
- Peripheral artery disease, (reduced blood flow to the legs)
- Atrial fibrillation (irregular heart rhythm), which can increase the risk of having a stroke
- Early death or disability



*It's important to know that **even one small healthy step can make a big difference** in your CKM health. Learning about your health now can help you understand your risk for CKM syndrome and find the best ways to protect your health.*

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Know Your Risk for CKM Syndrome — CKM Screening



During a visit with your healthcare professional, it's important to ask about your numbers that affect your heart, kidneys and metabolic health. These numbers come from common medical tests and other health information. Sometimes these numbers are the only way to know if someone is beginning to develop CKM syndrome.

Screening is needed to check your CKM health because conditions often have few or no symptoms. Act early to prevent, stop or possibly even reverse CKM syndrome progression. Don't wait for a medical emergency or serious health condition to get screened or make healthy changes.

Below are the key measures to know.

Blood glucose (sugar) – This blood test measures the glucose (sugar) in your blood. Higher blood glucose can mean you may have prediabetes or diabetes. [Learn more about blood glucose test results.](#)

Blood pressure – This is measured by wrapping a cuff around your arm to measure the force of your blood pushing against the walls of your blood vessels. High blood pressure can increase the risk for conditions of the heart, brain, and kidneys. [Learn more about what your blood pressure results mean.](#)

Lipid panel – This blood test measures your lipids (cholesterol and triglycerides). Abnormal lipid levels can increase the risk for heart attacks, strokes and other health conditions. [Learn more about what your cholesterol results means.](#)

Urine albumin-creatinine ratio (UACR) – This is a test that measures protein in the urine. Protein in the urine can be a sign of kidney damage. [Learn more about what this type of kidney test result means.](#)

Estimated glomerular filtration rate (eGFR) – This blood test measures kidney function. Low test results can be a sign of poor kidney health. [Learn more about what this type of kidney test result means.](#)

Body mass index (BMI) or waist circumference – BMI is found using your height and weight. Waist circumference (size) is measured by wrapping a tape measure around your waist. Numbers that are higher than normal can mean a person has excess body weight and has a higher risk of CKM syndrome. [Learn more about BMI scores.](#) [Learn more about waist circumference.](#)

PREVENT Online Calculator – This is a tool healthcare professionals may use during health assessments. It uses your health information to predict your risk of having a heart or brain medical event within the next 10 years and 30 years. Knowing your risk helps you and the healthcare team create the best treatment plan to improve your health outcomes. [Learn more here.](#)

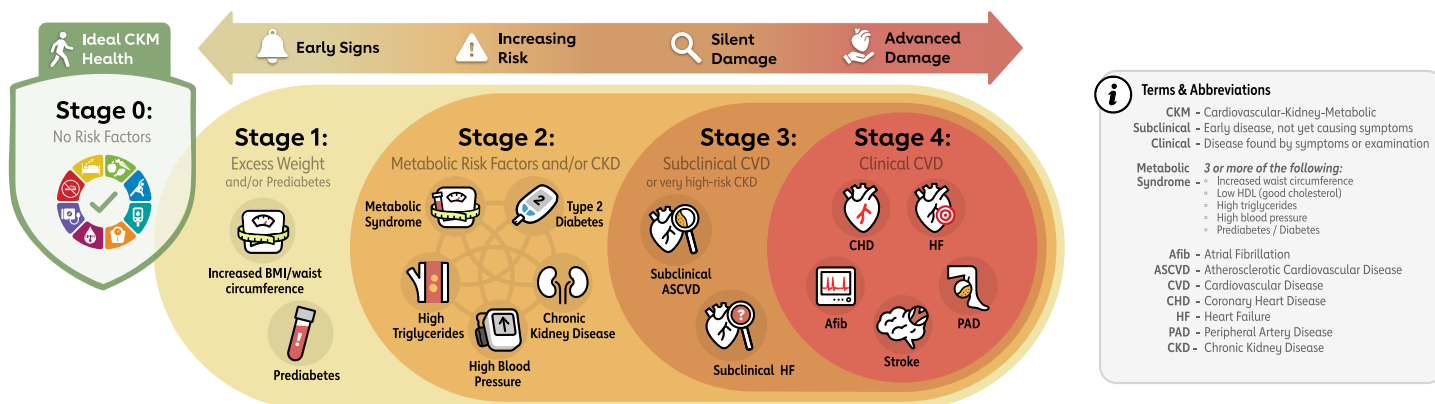


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Learn About the Stages of CKM Syndrome

CKM syndrome has four stages based on how a person's heart, kidneys, and metabolic system are working. Different health conditions are present during specific CKM syndrome stages.

CKM Staging Model



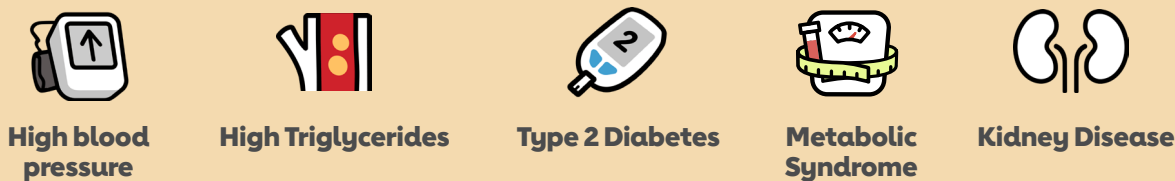
How does CKM syndrome develop?

People can shift between stages as their health conditions get better or worse. If detected early enough, and with the right care, some organ damage can be stopped or sometimes even reversed. Your healthcare professional can help review what actions are right for you and your health.

Stage 0 refers to people who do not have CKM syndrome. This stage is used to represent good CKM health. The focus of this stage is staying healthy and preventing the development of CKM syndrome.

Stage 1 includes people with excess weight (measured by waist circumference or BMI), those with insulin resistance, or prediabetes — meaning the body is starting to have problems regulating blood sugar.

Stage 2, includes the following conditions:



These conditions place added stress on blood vessels, which can result in damage to the kidneys, heart muscle and other organs.

Stage 3 is determined by specific health tests or imaging that may be used to check for damage to the heart, kidneys and blood vessels. If damage is found, or risk is high, even if you don't have symptoms, you may be in Stage 3.

Stage 4 is the most serious stage. It includes people who have been diagnosed with cardiovascular disease (coronary heart disease, heart failure, atrial fibrillation, stroke, peripheral artery disease) and may also have kidney failure. People in this stage may have symptoms such as chest pain, shortness of breath, weakness, leg pain, swelling or slow wound healing.

The list below lists common health conditions at each stage.

CKM Syndrome Stages and Health Conditions			
Stage 1	Stage 2	Stage 3	Stage 4
Excess weight or obese	Type 2 diabetes	Beginning signs of heart failure	Heart failure
	High blood pressure		Stroke
Prediabetes	High triglycerides	Beginning signs of atherosclerosis (ASCVD) (hardening of the arteries from plaque)	Atrial fibrillation (irregular heartbeat)
	Chronic kidney disease		Peripheral artery disease (reduced blood flow to limbs)
	Metabolic syndrome 3 or more of the following: • Increased waist circumference • Low HDL (good cholesterol) • High triglycerides • High blood pressure • Prediabetes/diabetes		Coronary heart disease (reduced blood flow to the heart)

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How Health Conditions Build on Each Other

Many health conditions in CKM syndrome start silently. A person may not even realize something is wrong. Over time, these conditions can add up and build on each other, leading to a heart attack, stroke, heart failure or other serious health problems.

Here are some steps you can take to protect your health. Talk to your healthcare team about your current health and your risk of CKM syndrome development or progression. ***If you already have it, find out what stage you are in by asking:***

- What stage of CKM syndrome do I have?
- Which health conditions do I currently have, and how far have those conditions progressed?
- Which health conditions am I at risk for due to the stage of CKM syndrome I have?
- Which tests are important for me to have now to understand my risk or stage of CKM syndrome?
- How often do I need to get lab tests or check my blood pressure, weight, or other health numbers?
- How do I manage my CKM health/syndrome?
- What should my goal numbers be?



Conditions that affect risk:

There are some **health conditions** that can affect the development or **progression** of CKM syndrome or might affect the type of treatment a person needs.

This includes:

- Chronic inflammation or certain autoimmune conditions
- Sleep disorders such as obstructive sleep apnea (OSA)
- Mental health conditions that include depression and anxiety
- Reproductive health factors for both women and men
- A liver condition called metabolic-dysfunction associated steatotic liver disease (MASLD)

In addition to these health conditions, having a family history of diabetes or kidney failure, belonging to certain demographic groups, or having worse social determinants of health, can raise the chances of development or progression of CKM syndrome.

Conditions that affect treatment:

There are some **health conditions** that affect what **types of treatments** are safe and effective if you have CKM syndrome.

This includes:



Pregnancy



Heart failure



Advanced chronic kidney disease

Treatment plans are guided by the 2026 Cardiovascular-Kidney-Metabolic syndrome (CKM syndrome) guideline. Here is some key information to know:

Lifestyle Changes:

Making changes to some of your health habits can prevent, stop or sometimes even reverse CKM syndrome progression, but it can be difficult to know where to start.



Here are some questions to ask your healthcare team that can help you know which changes can help the most:

- Could lowering my blood pressure or cholesterol lower my chance of CKM syndrome progression or help move me to a lower stage?
- Are my lab tests showing that my kidneys are unhealthy? If so, what steps can I take to improve my kidney health?
- Based on my current health, should I try to lose 5%–10% of my body weight?
- Will making changes to my diet, physical activity level or other health habits help lower my chance of CKM syndrome progression or improve my CKM syndrome stage?

Remember that focusing on just one health habit can start to improve your health today. Learn more at [Life's Essential 8™](#)

In addition to changing your health habits, medications or surgery might be treatment options your healthcare team talks with you about.



Common Medications to Know About:

- Glucagon-like peptide-1 (GLP-1)-based therapies and sodium glucose cotransporter 2 inhibitors (SGLT2i) are medications that work by lowering blood sugar, which can manage Type 2 diabetes. They may also reduce appetite, which can lead to weight loss, helping lower the risk for heart and kidney conditions.



Surgical Treatments to Know About:

- **Metabolic and bariatric surgery** is a treatment option that can help with weight loss and improve health for people who have obesity that have not responded to lifestyle modification or medication therapy.

Having surgery is a very important decision that people can talk through with their healthcare team. Before deciding to take these medications or have surgery, it's important to understand how they may affect you.

Your health needs can change over time, and your CKM syndrome treatment plan may shift to better support you. It can help to check in with your healthcare professionals at each visit or in between visits to understand what's changing and why.

Staying connected through these conversations can help keep your care aligned with your goals and what matters most to you. Taking time to ask questions and talk through updates can make each next step feel clearer and more manageable.



Talk with your healthcare team at each visit about changes to the plan that might include:

- Changes to your diet, physical activity or other lifestyle habits
- Changing your medication dosage, frequency or stopping the medication
- How often you need to see your healthcare team
- Other specialists to see who can help you manage certain health conditions
- How often to monitor your health at home, such as your blood pressure or weight
- How often you need to have certain blood or urine tests to monitor your health and see if your health condition is getting better or worse
- Additional tests needed



Overall health and mental health are connected. When one is not doing well, it can affect the other. Your risk for CKM syndrome progression is higher if you have common mental health conditions, such as depression or anxiety.

If you are unsure if you have a mental health condition:

- **Talk with your healthcare team** to be screened for these conditions if you are unsure if you have them.
- **If you were pregnant** within the last year, ask to be screened for post-partum depression. This condition can happen to someone even if they have never had a mental health condition before.

If you have a mental health condition:

- **You and your care team can decide the best ways to manage your health.** Talking with your care team can help you both decide the best ways to get the care you need based on your preferences and goals.

Find support and resources:

- **Having support can make it easier to manage** these health conditions and find available resources. With the American Heart Association's Support Network, you can reach out to others who have the same condition. Learn more: [Support Network](#)
- **It can be challenging to get the care** you need if you lack resources, such as:
 - Transportation
 - Insurance
 - Help with caregiving responsibilities
 - Being able to pay medical bills



The American Heart Association is offering a navigator to help answer questions about your health at no cost.

A trained navigator can help you:

- Understand your health and doctor's instructions
- Find helpful community resources
- Work through problems that make it hard to stay healthy

You don't have to do this alone. Visit the link below, or call the number below to talk to the Navigator.

heart.org/NavigationSelfReferral

Navigator line: 1-800-242-8721

When living with CKM syndrome, care often involves multiple health professionals, each focusing on different aspects of heart, kidneys and metabolic health.

Because CKM syndrome affects multiple body systems, a team-based approach helps ensure coordinated, timely and comprehensive care.

A CKM syndrome care team may include the following healthcare professionals:

- **Cardiologist** – A doctor specializing in heart health
- **Primary care professional (PCP)** – Family doctor, internal medicine doctor, physician associate or nurse practitioner
- **Nephrologist** – A doctor specializing in kidney health
- **Endocrinologist** – A doctor specializing in hormone and metabolic health
- **Hepatologist** – A doctor specializing in liver health
- **Care coordinator/nurse care manager** – Registered nurses or other professionals who help arrange care
- **Pharmacist** – A specialist in medications
- **Registered dietitian/nutritionist (RD/RDN)** – A nutrition specialist trained in medical nutrition therapy
- **Certified exercise specialist/physical therapist/occupational therapist** – Movement and rehabilitation experts
- **Mental health professional (psychologist, counselor, therapist, social worker)** – Specialists in emotional and mental well-being
- **Community health worker/patient navigator** – Professionals who help address barriers to care
- **Podiatrist** – A doctor specializing in feet and ankles
- **Ophthalmologist/optometrist** – A doctor specializing in eyes and vision specialists
- **Behavioral or lifestyle coach** – Professionals trained in behavior change
- **CKM Care Coordinator** – Coordinates care, providers, and patient support
- **Diabetes Care and Education Specialist (DCES)** – Provides diabetes education and self-management coaching
- **Social Worker** – Connects patients to resources and helps address barriers to care



CKM syndrome care is a team effort.

Understanding the roles of each care team member can support informed decision-making and help ensure coordinated care across all stages of health.

UNDERSTANDING THE GUIDELINES

What are clinical practice guidelines, and how are they used?

Clinical practice guidelines help the healthcare team know the best ways to care for people with a certain health condition. They assist healthcare professionals in making informed decisions about your care. They can also help you understand your condition and treatment options. The American Heart Association and the American College of Cardiology in collaboration with other healthcare organizations published the clinical practice guidelines for Cardiovascular-Kidney-Metabolic Syndrome (CKM Syndrome) in June 2026.

The guideline is written about a specific health condition and includes recommendations about:



Healthy lifestyle changes



Medical tests



Medications



Medical procedures



Surgeries



Who writes the clinical practice guidelines?

A group of medical experts who specialize in the condition write the guideline. This group also includes patient representatives. Together, they review research studies and decide what care works best.

They also identify gaps in care where more research studies might be needed. The guidelines include information about CKM syndrome and how it affects your health.

The development of a guideline includes a detailed research review process. This toolkit provides a general description of the process to help patients and caregivers understand the CKM syndrome guideline.

Visit here to learn more about CKM syndrome:

heart.org/myckmhealth