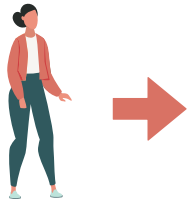
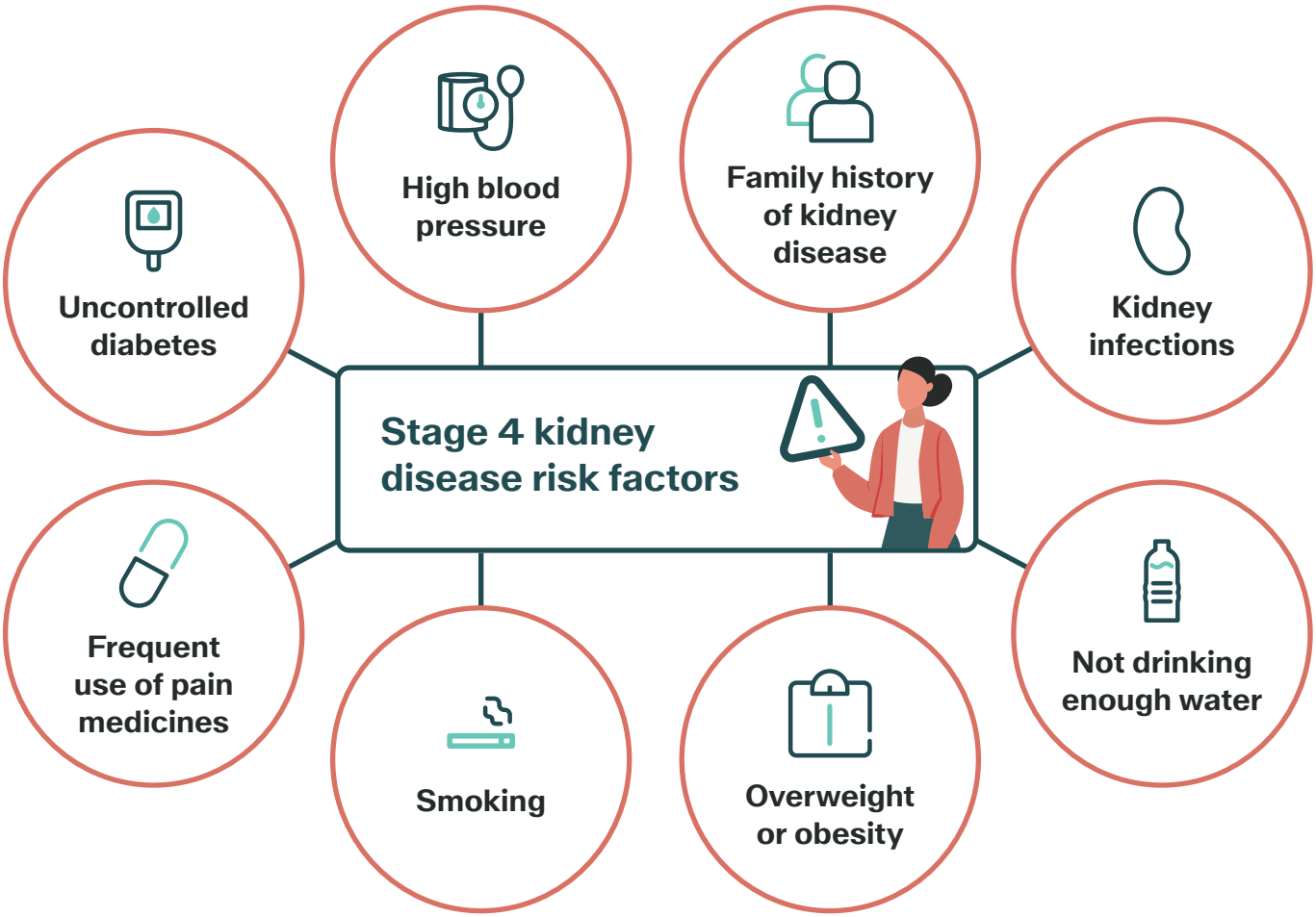
Chronic Kidney Disease: Stage 4

Stages of chronic kidney disease		GFR	% Kidney function
Stage 1	Normal or high function	90 or higher	 90–100%
Stage 2	Mildly decreased function	60–89	 60–89%
Stage 3a	Mild to moderately decreased function	40–59	 40–59%
Stage 3b	Mild to moderately decreased function	GFR 30–44	 30–44%
Stage 4	**Severely decreased function**	**GFR 15–29**	 **15–29%**
Stage 5	Kidney failure	Less than 15	 Less than 15%



Stage 4 means your kidneys have severe damage. Lab tests may show signs of kidney damage, such as protein or a small amount of blood in your urine. You will need care from a kidney specialist.

CENTRAL HEALTH



What this means for you

Your kidneys are severely damaged and do not work. You may feel more tired than usual. You may also have swelling in your legs or feet, muscle weakness, or pale skin. Treatment can help slow the disease and manage symptoms.

How to help protect your kidneys at Stage 4

- Control your blood sugar if you have diabetes.
- Control your blood pressure.
- Drink more water.
- Do not smoke or drink alcohol.
- Do not use illegal drugs.
- Take your medicines exactly as directed.
- Eat less salt and fewer processed foods.
- Keep regular doctor visits.

Medicines

Some medicines can help slow kidney damage and protect the heart and blood vessels. Your doctor will tell you what is right for you.



Blood pressure medicines
These help protect your kidneys and lower your blood pressure.

Examples include: ACE inhibitors (lisinopril) and ARBs (losartan).

Blood sugar medicines
These help keep your blood sugar in a healthy range.

Examples include: metformin and insulin.

Anemia medicines

If you have anemia, these medicines help your body make red blood cells. Your kidneys may not make enough of a hormone called EPO.

Examples include: Erythropoietin (EPO) injections, iron pills, or iron given through an IV.

Bone and mineral medicines
They help control calcium, phosphorus, and vitamin D to keep bones strong.

Examples include vitamin D (calcitriol) and phosphate binders such as sevelamer or calcium acetate.

Water pills (diuretics)
These help remove extra fluid from your body, reduce swelling, and lower blood pressure.

Examples include: furosemide and torsemide.

Cholesterol medicines
These help keep your heart and blood vessels healthy.

Examples include statins such as Atorvastatin and Rosuvastatin.

Medicines to avoid

Some pain medicines can harm your kidneys. These are called NSAIDs (nonsteroidal anti-inflammatory drugs). Always ask your doctor before taking over-the-counter pain medicine.

Common examples include:

- Ibuprofen (Advil®, Motrin®, Midol®, NeoProfen®)
- Naproxen (Aleve®, Naprosyn®, Anaprox®, Naprelan®)
- Aspirin at high doses (Bayer®, Ecotrin®, Bufferin®, Anacin®)
- Diclofenac (Voltaren® tablets, Cataflam®, Zipsor®, Cambia®, Solaraze®)
- Celecoxib, which is a COX-2 inhibitor (Celebrex®)
- Meloxicam (Mobic®, Vivlodex®)
- Ketorolac (Toradol®)
- Indomethacin (Indocin®)
- Etodolac (Lodine®)
- Piroxicam (Feldene®)
- Nabumetone (Relafen®)
- Ketoprofen (Orudis®, Oruvail®)
- Oxaprozin (Daypro®)

Diet

This is the time for you to see a kidney dietitian. They help you create a personalized meal plan that supports your kidneys, heart, and overall health. It is important to limit foods that are high in potassium, phosphorus, and protein.

What you eat and drink becomes more specific at this stage. You will be asked to follow a heart-healthy, high-plant-based meal plan, such as the Dietary Approaches to Stop Hypertension (DASH) diet.

Eat more

- Fruits and vegetables (aim for a variety and choose options based on your lab values if your potassium is elevated).
- Plant-based proteins such as beans, lentils, tofu, nuts, and seeds in appropriate portions.
- Fiber-rich foods such as vegetables, fruits, oats, brown rice, quinoa, and whole grains.
- Healthy fats such as olive oil, avocado oil, nuts, and seeds.
- Herbs, spices, garlic, lemon, and salt-free seasonings to flavor foods instead of salt.
- Water and fluids as recommended by your health care team.



Eat less

- Salty and processed foods.
- Large portions of animal proteins.
- Fast food and fried foods.
- Sugary drinks and sweets.
- Packaged foods.



Further treatment

As your kidney disease gets worse, your doctor will talk with you about ways to help your kidneys. If your kidneys work at 20% or less, it is time to plan ahead. These treatments replace kidney function if your kidneys are no longer able to clean your blood well enough.

There are two main options.

1 Dialysis

A treatment that removes waste and extra fluid from your blood when your kidneys cannot. A machine or a special fluid helps to clean your blood.

2 Kidney transplant

If you get a transplant early enough, you may be able to avoid dialysis. Some people can get a kidney transplant before starting dialysis.

Your goals



These habits help protect your kidneys.