

PAIN MEDICINES AND YOUR KIDNEYS

What You Need to Know



National
Kidney
Foundation®

www.kidney.org

National Kidney Foundation's Kidney Disease Outcomes Quality Initiative

Did you know that the National Kidney Foundation's Kidney Disease Outcomes Quality Initiative (KDOQI®) offers guidelines and commentaries that help your doctor and healthcare team make important decisions about your medical treatment? The information in this booklet is based on those recommended guidelines.

Stages of Kidney Disease

There are 5 stages of kidney disease. They are shown in the table below. Your doctor determines your stage of kidney disease, based on the presence of kidney damage and your glomerular filtration rate (GFR), which is a measure of your level of kidney function. Your treatment is based on your stage of kidney disease. Speak to your healthcare provider if you have any questions about your stage of kidney disease or your treatment.

STAGES OF KIDNEY DISEASE		
Stage	Description	Glomerular Filtration Rate (GFR)*
1	Kidney damage (e.g., protein in the urine) with normal GFR	90 or above
2	Kidney damage with mild decrease in GFR	60 to 89
3a	Mild to moderate decrease in GFR	45 to 59
3b	Moderate to severe decrease in GFR	30 to 44
4	Severe reduction in GFR	15 to 29
5	Kidney failure	Less than 15

*Your GFR number tells your healthcare provider how much kidney function you have. As chronic kidney disease progresses, your GFR number decreases.

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Many people take pain medicines to help them treat pain resulting from illness or injury. They are the most often used medicine in the United States. However, pain medicines can have different effects on the kidneys, depending on the type of medicine, how it is used, and how well your kidneys are working. This educational brochure will help answer some questions you might have about pain medicines and your kidneys.

What are analgesics?

Pain medicines are also called analgesics. They are used to help relieve pain, but can also sometimes be used to help lower fever or inflammation (redness and swelling from an injury or illness), depending on the type of pain medicine. These benefits are important, especially for those who need them, including people with arthritis, headaches, muscle aches, colds, toothaches, menstrual cramps, and sinus infection.

Examples of pain medicines that are available over-the-counter (OTC) include aspirin, acetaminophen, ibuprofen, and naproxen sodium. OTC means they are available without a prescription, but if you have kidney disease, you should still speak to your healthcare provider about any medicines before you take them. Some of these medicines also come in higher strength, or dose, with a prescription.

OTC pain medicines are usually available as a pill, either on its own or combined with other medicines, such as certain cold and cough medicines. Some pain medicines are also available in a topical form, meaning they are applied on the skin as a cream, gel, or patch.



Are pain medicines safe?

Pain medicines can help relieve pain and are generally safe when taken as directed. However, as with any medicine, they can have side effects and you should use them as directed on their labels. If you do not use pain medicines as directed, they may cause problems with your stomach, liver, or kidneys, depending on the type, dose, and duration of pain medicine used. The harm to your kidneys can be sudden, and result in acute kidney injury (AKI). In some cases, if you stop the pain medicine you may reverse short-term harm to your kidneys, meaning kidney function may recover. Continued overuse or misuse of certain pain medicines can also lead to a slow loss of kidney function over time, or chronic kidney disease (CKD).

What are NSAIDs?

The term “NSAID” stands for nonsteroidal anti-inflammatory drug. NSAIDs are a group of pain relievers. Some NSAIDs are available OTC, including ibuprofen (for example, Advil®, Motrin®), naproxen sodium (for example, Aleve®), and aspirin (for example, Bayer®). Generic versions (no brand name) of these brands are also available. People use NSAIDs to reduce fever and relieve pain. Prescription NSAIDs can be used to reduce inflammation caused by many medical problems or injuries.

Are NSAIDs safe to take?

OTC NSAIDs are generally safe for occasional use when taken as directed. However, everyone should be careful not to take too much or to take them for too long. The risk of heart attack or stroke may increase if you use NSAIDs more than directed, or longer than directed. NSAIDs may cause severe stomach bleeding. The chance of stomach bleeding is higher

if you fall in certain groups, such as if you are age 60 or older, or if you take a blood thinning drug, steroids, or other drugs containing prescription or OTC NSAIDs. You should ask your healthcare provider before using NSAIDs if you have high blood pressure, heart disease, liver cirrhosis, or kidney disease.

What is acetaminophen?

Acetaminophen is an analgesic, but not part of the NSAID group. It is available OTC, branded (Tylenol®), and as a generic. People also use acetaminophen to reduce fever and relieve pain for a number of medical problems or injuries. It is not recommended to treat inflammation.

Is acetaminophen safe to take?

Acetaminophen is safe and effective when used as directed by the label. Acetaminophen is not known to affect kidney function when taken in the recommended dosage, the way other pain medicines can. For this reason, it is the drug that health care providers often recommend for occasional use in patients with kidney disease. However, if you have kidney disease you should still talk to your healthcare provider before taking any new medicine. It is important for you to know that any drug can be harmful if you exceed labeled doses or use it for longer than directed by the label. Taking more than the maximum daily dose of acetaminophen (4000 mg) can harm the liver. Severe liver damage may also occur if you take acetaminophen with other drugs containing acetaminophen or take 3 or more alcoholic drinks per day. People with liver disease, or people who drink too much alcohol, should not take acetaminophen without first talking to their healthcare provider.

Is aspirin safe for regular use?

Aspirin (Bayer®, generic), also an NSAID, is a pain medicine that has been available for many years. People use aspirin to ease pain, and reduce fever. Healthcare providers often prescribe aspirin to people who have had a heart attack or chest pain (angina) in the past, to help reduce the chances of a recurrent heart attack. Aspirin is safe and effective when used as directed, however, there is a higher chance of stomach bleeding with aspirin than with other OTC pain medicines. Therefore, if you have a history of stomach ulcers/bleeding, or other bleeding disorders, talk to your healthcare provider before using aspirin. If you have other health problems such as liver disease or heart failure you should not use aspirin without speaking to your healthcare provider first.



What can I do to keep my kidneys healthy if I need medicine for pain?

You should speak to your healthcare provider about the best choice of pain medicine for you. There are also a number of steps you can take. You can often prevent kidney disease caused by pain medicine. Here are some things you can do to help keep your kidneys healthy.

Before taking pain medicine, talk to your healthcare provider about the following questions:

- Do you have a medical problem?
- Do you have reduced kidney function?
- What other medications are you currently taking (prescription and OTC)?
- Do you have a history of problems with certain pain medicines?
- Are you pregnant or planning to get pregnant?

There are also some safeguards you can take while using pain medicine, including the following:

- Read and follow the package label, including any warnings
- Check all ingredients listed on the label of any pain medicine. Some pain medicines, such as acetaminophen and ibuprofen, are combined with other cold and cough medicines. Many pain management ingredients are also available both OTC and in prescription medicines
- Take only how much you need per day, not to exceed the daily limit, and take it for the shortest possible period of time needed to relieve your symptoms

- Avoid taking more than the amount stated on the label, or more than your healthcare provider recommends
- Avoid prolonged use (longer than stated on the label or recommended by a healthcare provider)
- Drink enough water (usually six to eight glasses a day unless your healthcare provider tells you to drink less)
- Check the label before taking with alcohol
- Contact your healthcare provider if pain or fever continues, or if you have any sudden or unusual symptoms

You need to think about the good and bad effects of pain medication, as with any treatment. Pain that does not go away and is not treated can become a serious health problem, so fear of side effects should not keep you from taking pain medicine. Talking to your healthcare provider, using medication as directed, and taking certain precautions, can help you benefit from pain medicine while managing side effects.



What if I have more questions?

Talk to your healthcare provider if you have more questions about pain medicines and kidney disease. You can also contact the following organizations.

National Kidney Foundation

30 East 33rd Street

New York, NY 10016

NKF CARES information help line:

1.855.NKF.CARES (1.855.653.2273)

nkfcares@kidney.org

www.kidney.org

Centers for Disease Control and Prevention (CDC)

1600 Clifton Road

Atlanta, GA 30329

1.800.CDC.INFO (1.800.232.4636)

www.cdc.gov

Arthritis Foundation

1330 West Peachtree Street

Suite 100

Atlanta, GA 30309

404.872.7100

www.arthritis.org

The **National Kidney Foundation** is the leading organization in the U.S. dedicated to the awareness, prevention, and treatment of kidney disease for hundreds of thousands of healthcare professionals, millions of patients and their families, and tens of millions of Americans at risk.

Help fight kidney disease. Learn more at **www.kidney.org**



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