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## **Non-opioids and Other Drugs Used to Treat Cancer Pain**

Non-opioids or non-narcotics, like acetaminophen and non-steroidal anti-inflammatory drugs (NSAIDs) control mild to moderate pain. Some can be bought without a prescription (over-the-counter). These medicines are stronger pain relievers than most people realize. In many cases, non-opioids are all you'll need to relieve your pain, especially if you "stay on top of the pain." Staying on top of the pain means you should take pain relievers regularly, and not wait until your pain level becomes too intense. Waiting too long can make the pain harder to treat.

### **Acetaminophen**

Acetaminophen is commonly known as Tylenol. It relieves pain much the same way NSAIDs do, but it doesn't reduce inflammation as well as NSAIDs do. People rarely have side effects from the usual dose of acetaminophen. But liver and kidney damage may result if you take large doses of this medicine every day for a long time or drink alcohol with the usual dose. Even moderate amounts of alcohol (3 drinks per day) can lead to liver damage in people taking acetaminophen. You also need to be careful about taking other drugs that have added acetaminophen. See the section on Precautions about aspirin, acetaminophen, and ibuprofen in other medicines.

Your doctor may not want you to take acetaminophen regularly if you're getting chemotherapy because it can cover up a fever. Your doctor needs to know if you have a fever because it could mean you have an [infection](#)<sup>1</sup>, which needs to be treated quickly.

### **Non-steroidal anti-inflammatory drugs**

Non-steroidal anti-inflammatory drugs (NSAIDs) work a lot like aspirin. Either alone or used with other medicines, NSAIDs can help control pain. Before you take any NSAIDs

or other non-opioids, ask your doctor, pharmacist, or nurse if it's safe for you to take it with your other medicines, and how long you can take it. See the chart below for examples of commonly used NSAIDs.

### ***Precautions about NSAIDs***

Some people have a higher risk of complications related to NSAIDs. In general, NSAIDs should be avoided by people who:

- Are allergic to aspirin or any other NSAIDs
- Are on [chemotherapy](#)<sup>2</sup>
- Are taking steroids
- Are taking blood pressure medicines
- Have stomach ulcers or a history of ulcers, gout, or bleeding disorders
- Are taking oral medicine (drugs by mouth) for diabetes or gout
- Have kidney problems
- Will have surgery within a week
- Are taking blood-thinning medicine
- Are taking lithium

If you drink alcohol, be careful taking NSAIDs. It can cause stomach upset and raise the risk of having reflux or even **bleeding in the stomach**. Smoking may also increase this risk. NSAIDs may also **raise your risk of heart attack or stroke**, especially if you take them for a long time.

**Children and teens should not take aspirin or products that contain it.**

### **Precautions about aspirin, acetaminophen, and ibuprofen in other medicines**

Some opioids also contain aspirin or acetaminophen in the same pill. A few also contain ibuprofen. It can be dangerous if you take these drugs without being aware of this.

- If one of your doctors tells you not to take aspirin or ibuprofen, or if you can't take NSAIDs for some reason, be sure to check your medicine labels carefully.
- If one of your prescription medicines has acetaminophen in it, and you also take over-the-counter acetaminophen for pain, you can get too much without knowing it. Too much acetaminophen can damage your liver.
- If you're not sure if a medicine contains aspirin, acetaminophen, or ibuprofen, ask a pharmacist.

- If you take any non-prescription medicine for a cold, sinus pain, or menstrual symptoms while you're taking pain medicines, read the label carefully. Most of these drugs are combination products that contain aspirin, ibuprofen, or acetaminophen. Check with a pharmacist to find out what you can safely take with your pain medicines.

### Side effects of acetaminophen and NSAIDs\*

Common non-opioid pain relievers	Action	Precautions
acetaminophen (Tylenol)	Reduces pain and fever	<p>Large doses (more than 4 grams in 24 hours) can damage the liver or kidneys.</p> <p>May cause liver damage in people who have 3 or more alcoholic drinks per day.</p> <p>Acetaminophen reduces fever, so ask your doctor what to do if your body temperature is higher than normal (98.6°F or 37°C) while you're taking this medicine.</p>
<p><b>Over-the-counter NSAIDs</b></p> <p>aspirin</p> <p>ibuprofen (Motrin, Advil)</p> <p>naproxen sodium (Aleve or Naprosyn)</p> <p><b>Prescription NSAIDs</b></p> <p>celecoxib (Celebrex)</p> <p>diclofenac</p>	Reduce pain, inflammation, and fever	<p>Can irritate the stomach</p> <p>Can cause bleeding of the stomach lining, especially if combined with alcohol or if you smoke</p> <p>Can cause kidney problems</p> <p>Avoid these drugs if you are on anti-cancer drugs that may cause bleeding, or if you are taking blood thinners, steroids, blood pressure medicines, or lithium.</p> <p>Aspirin and NSAIDs reduce fever, so ask your doctor what to do if your body temperature is higher than normal (98.6°F or 37°C) while you are taking one of these medicines.</p> <p>May increase your risk of stroke or heart attack.</p> <p><b>Children and teens should not take aspirin</b></p>

(Voltaren, Cambia, Cataflam, Zipsor, Zorvolex)		<b>products, which can cause Reye syndrome.</b>
indomethacin (Indocin)		
ketorolac		
meloxicam (Mobic)		
nabumetone		
naproxen (Naprosyn or Anaprox)		
oxaprozin (Daypro)		
piroxicam (Feldene)		
sulindac		

\* NSAIDs = Non-steroidal anti-inflammatory drugs

### How drugs are named

A drug may have as many as 3 different names: Brand, generic, and chemical.  
For example:

***Brand names: Tylenol, Tempra, Liquiprin, Anacin, Paramol (and many more)***

Drug companies give their products brand names, and some products have more than one brand name. You should also know that the same brand name may be used on different drugs, since the name belongs to the company. Read the labels to see what ingredients are in each medicine.

***Generic names: acetaminophen***

The US Food and Drug Administration (FDA) approves the generic names by which drugs are usually known. Sometimes medicines can have the same generic name, but are made by different companies. Because the companies may produce the medicines differently, they may differ slightly in the way they're absorbed by the body. For this reason, your doctor may sometimes prefer that you take a brand-name drug. Generic drugs usually cost less than brand-name ones. Ask your doctor, nurse, or pharmacist if you can use a cheaper generic medicine. Pharmacists are careful to get high-quality generic products, so it's often possible to substitute a generic.

### ***Chemical names: N-(4-hydroxyphenyl) acetamide***

Chemical names tend to be long and hard to pronounce, so they are not used often.

### ***What you need to know about drug names***

Many pain relievers are available under both generic and brand names. Your doctor, nurse, or pharmacist can tell you the generic and common brand names of any medicines you're taking. It's always good to know both because you may hear either name when talking about your medicines. Knowing both names can also keep you from getting confused when keeping track of prescriptions and pill bottles. It can also keep you from taking too much of the same medicine if it's prescribed using 2 different names.

### **Drug additives**

Along with the main substance (for example aspirin, acetaminophen, or ibuprofen), some brands contain additives. Common additives include:

- **Buffers** (such as magnesium carbonate or aluminum hydroxide) to decrease stomach upset
- **Caffeine** to act as a stimulant and to improve the effect of some pain medicines
- **Antihistamines** (such as diphenhydramine or pyrilamine) to help you relax or sleep

Medicines with additives can cause side effects you wouldn't expect from the main drug. For example, antihistamines sometimes cause drowsiness. This may be all right at bedtime, but it could be a problem during the day. Additives tend to increase the cost of non-prescription pain relievers. They can also change the action of other medicines you may be taking or even keep your body from absorbing the other drug. When you start a new drug, even one you can get over the counter, always talk with your doctor or pharmacist about what you're already taking to see if the combination can cause

harmful effects.

Plain aspirin, acetaminophen, or ibuprofen probably works as well as the same medicines with additives. But if you find that a brand with certain additives is a better pain reliever, ask your doctor, nurse, or pharmacist if the additives are safe for you. Talk with them about any concerns you may have about the drugs contained in your non-prescription pain medicines.

## Other medicines commonly used to help treat cancer pain

Many different types of medicines can be used along with (or instead of) opioids and non-opioids to help relieve cancer pain. Some of these medicines can help relieve pain or increase the effect of the pain medicine. Others lessen the side effects of pain medicines. These drugs are often started at low doses and increased over time. The table shows the classes and some examples of drugs that are not really pain medicines, but might be used to help you get the best pain relief with as few side effects as possible.

Drug class	Generic (brand) name	Action	Side effects
Antidepressants	amitriptyline (Elavil), bupropion (Wellbutrin, Zyban), imipramine (Tofranil), nortriptyline (Pamelor), desipramine, doxepin (Silenor), duloxetine (Cymbalta), venlafaxine	Used to treat tingling or burning pain from damaged nerves. Nerve injury (and nerve pain) can be caused by surgery, radiation, chemo, or the cancer itself.	Dry mouth, blurred vision, trouble passing urine, sleepiness, constipation, Drop in blood pressure with dizziness or fainting when standing. May cause irregular heartbeat, especially in patients with heart disease.

	(Effexor)		
Antihistamines	hydroxyzine (Atarax, Vistaril), diphenhydramine (Benadryl)	Can help control nausea and help people sleep. Help control itching.	Drowsiness, dry mouth and nose, irritability, restlessness, nervousness, trouble passing urine
Anti-anxiety drugs	diazepam (Valium), lorazepam (Ativan)	Used to treat muscle spasms that may go along with severe pain. Also lessen anxiety.	Drowsiness. May cause urinary incontinence (loss of bladder control).
Stimulants and amphetamines	caffeine, dextroamphetamine (Dexedrine), methylphenidate (Ritalin), modafinil (Provigil)	Increase the pain-relieving action of opioids and reduce the drowsiness they cause.	Irritability, rapid heartbeat, decreased appetite
Anti-convulsants	carbamazepine (Tegretol), clonazepam (Klonopin), gabapentin (Neurontin), pregabalin (Lyrica)	Help to control tingling or burning from nerve pain caused by the cancer or cancer treatment.	Liver problems, low red and white blood cell counts. Some may cause sleepiness and dizziness.
Steroids	dexamethasone (Decadron), prednisone	Help relieve bone pain, pain caused by spinal cord and brain tumors, and pain caused by inflammation.	Increased appetite and thirst. Fluid build-up in the body, increased blood sugar, stomach

			irritation, confusion. Changes in behavior, trouble sleeping.
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## Hyperlinks

1. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/low-blood-counts/infections.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/low-blood-counts/infections.html)
2. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html)

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Last Medical Review: January 3, 2019 Last Revised: January 3, 2019

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