

# NIH News in Health

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**Inside News:** 3 Bruises 4 Retraining Brain After Chronic Pain 4 Thyroid Problems 4 When To Test for COVID-19

## Is It Flu, COVID-19, Allergies, or a Cold? Staying Healthy This Winter

Feeling sick can be especially concerning these days. Could your sniffles be caused by COVID-19? Or the flu? A cold? Or maybe allergies?

Determining the cause of an illness can be tricky because many share some symptoms. They can leave you sniffing, coughing, and feeling tired. But there are important differences.

Figuring out what's making you sick can help you recover and prevent spreading sickness to others.

### Flu vs COVID-19 •

“Distinguishing COVID from flu can be difficult because the symptoms overlap so much,” explains Dr. Brooke Bozick, an NIH expert on respiratory diseases that affect the lungs.

Flu and COVID-19 are caused by different viruses that can be spread among people. Flu is caused by the influenza virus. COVID-19 is caused by SARS-CoV-2. Both can give you a fever, cough, headaches, and body aches.

Flu and COVID-19 also spread similarly. They're transmitted by small particles that come from your nose and mouth when you sneeze, cough, sing, or talk, raising the possibility of infecting people who are nearby. Infected people may not have symptoms, but can still pass along either virus.

“Both influenza and COVID can be spread to other people before individuals develop symptoms,”



notes Dr. Aubree Gordon, an infectious disease expert at the University of Michigan.

COVID-19 symptoms can take longer than flu symptoms to develop, she explains. Someone with flu usually has symptoms 1 to 4 days after being infected. A person with COVID-19 typically shows symptoms about 5 days after infection, although this can range from 2 to 14 days.

One telling sign of COVID-19 in some cases is loss of smell or taste. But because of other similar symptoms, there's really only one way to be certain if you have COVID-19 or flu: Get tested.

“You can go and get a COVID test at many pharmacies, and your doctor can administer tests for flu,”

Bozick says. COVID-19 tests are also available at many health centers. And you can buy testing kits approved for use at home.

**Could It Be a Cold? Or Allergies?** • Like flu and COVID-19, colds are also caused by viruses and can be passed to others.

Symptoms of a cold tend to be mild. You may have a runny nose, cough, congestion, and sore throat. But you won't usually have the aches and fever that are common with COVID-19 and flu. Often, you'll feel better in a couple of days.

There's no cure for the common cold. Typical treatments include rest, fluids, and over-the-counter medicines. Some complementary treatments may help with cold symptoms, too. Taking honey may help with nighttime cough for children over 1 year old. Rinsing your nose and sinuses can help with congestion. You can use a neti pot or other nasal rinsing device. Be sure to only use water that's been properly processed, such as distilled or boiled water, not tap water. Nasal rinses can bring relief for both cold and allergies.

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Allergies can cause a runny nose and sneezing. But they're not contagious. If your eyes, nose, or ears itch, that also could be an allergy.

Exposure to things like dust, pets, and tree or grass pollen can trigger allergies, which are caused by the **immune system** overreacting.

Allergy symptoms tend to stop when you're no longer exposed to the cause. Unless you have asthma, allergies typically do not cause breathing problems. Allergies can be treated with drugs like antihistamines, decongestants, and nasal steroids.

**Wintery Mix of Viruses** • Winter is the prime cold and flu season. You're more likely to be indoors and closer to others when it's colder outside. Weather also plays a role in the spread of viruses.



## Definitions

### Immune System

The system that protects your body from invading viruses, bacteria, and other microscopic threats.

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“Cold and flu viruses survive better and are more transmissible if it's cooler and if there's lower humidity,” Gordon explains.

Experts are concerned that flu and COVID-19 cases may increase and overlap in the winter. Flu cases usually start to increase around October and peak between December and February. Being infected with flu and SARS-CoV-2 at the same time is possible, as is showing symptoms of both.

If you're sick with the flu, your doctor may prescribe antiviral drugs. Such drugs can make your flu milder and shorten the time you are sick. They work best if they're used early in your illness.

The FDA has also approved one antiviral drug, called remdesivir, to treat COVID-19. Other treatments are in development and under review. No complementary approaches have been shown to be helpful for fighting off flu or COVID-19.

Fortunately, strategies to prevent the spread of COVID-19 also prevent the spread of flu and cold. “Measures like masking and social distancing work for other respiratory viruses, as well as COVID-19,” says Dr. Chip Walter, who studies vaccine development at Duke University.

**Staying Well** • There's another really important way to fight viruses. “Get your flu shot and COVID-19 vaccine,” Walter advises. They are safe and effective ways to protect yourself and those around you.

Don't forget to vaccinate your children, too. That is the best way to protect their health. COVID-19 vaccines are now recommended for everyone age 5 years and older.

Flu vaccines are recommended for everyone 6 months and older. Flu vaccines are designed to protect against the four types of flu viruses that scientists expect to circulate that year.



## Wise Choices Stay Well this Winter

Tips to help you avoid getting sick:

- **Get a flu shot and COVID-19 vaccine.**
- **Avoid close contact with people who are sick.** If you're sick, limit contact with others to keep from infecting them.
- **Cover coughs and sneezes.** Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- **Wash your hands often with soap and water.** Scrub your hands for at least 20 seconds. Not sure how long that is? Hum Happy Birthday twice. Be sure to lather the backs of your hands, between your fingers, and under your nails.
- **Use hand sanitizer if soap and water are not available.**
- **Avoid touching your eyes, nose, and mouth.** Germs spread this way.
- **Clean and disinfect surfaces and objects** that may be contaminated with viruses.

Researchers like Walter and others are working to develop flu vaccines that last longer and offer broader protection against many flu strains.

Masks continue to be an important tool for stopping the spread of respiratory viruses, such as COVID-19. “With the pandemic still ongoing, it's going to be really important that people wear masks,” Gordon says. Try to avoid crowded indoor situations when possible, too.

For more tips on guarding against getting sick this winter, see the Wise Choices box. ■



## Web Links

For more about COVID-19, flu, colds, allergies and an online Q&A, see “Links” in the online article:  
[newsinhealth.nih.gov/2022/01/it-flu-covid-19-allergies-or-cold](https://newsinhealth.nih.gov/2022/01/it-flu-covid-19-allergies-or-cold)

# Bruising Questions

## The What, Why, and How of Bruises

Many things can cause a bruise: minor injuries, falls, small collisions. While bruises may hurt, they're usually harmless. But sometimes, they might be a sign of a deeper problem.

If you bump part of your body hard enough, you can break tiny blood vessels under your skin. But if you don't break the skin, the blood has nowhere to go. It gets trapped under the skin's surface, causing a bruise.

When you first get a bruise, the newly trapped blood makes it look pink or red. Over the next few weeks, the body naturally breaks down the blood and absorbs it. So as the bruise fades, it changes colors. This is part of the normal healing process. Some bruises can take weeks or months to heal.

What can contribute to bruising? Some people bruise more easily than others, says Dr. José López, an expert on bleeding disorders at Bloodworks Northwest Research Institute. This can be influenced by many things, including your **genes**. Other factors, such as diet, can also

affect how easily you bruise. For example, deficiencies in vitamin C or K can make you bruise more easily.

Some people may just be more prone to bumping into things. And skin naturally becomes thinner and bruises more easily as you age.

You can take steps to make your home safer from minor bumps and falls. Keep walkways clear of clutter and furniture. Good lighting can also help you avoid bumping into things.

Bruises may be painful, but they're usually not dangerous. If a bruise does hurt, an over-the-counter pain killer may help. But some drugs used to treat pain, like aspirin or ibuprofen, can actually increase the tendency to bruise, López explains.

Putting ice on the affected area for a few minutes at a time can help reduce swelling. Wrap the ice in a clean towel to avoid irritating the skin.

If you notice a change in where or how often you're bruising, consider talking with a health care professional. "If bruising becomes really common, if it's not provoked, or if there's a change in your bruising patterns, get it checked out," López says.

These can be signs that bleeding is happening inside the body when it shouldn't. Others include a rash made of tiny bruises, called purpura. Or tiny, pin-point sized red spots called petechiae.

Excessive bruising can be triggered by many things. Examples include liver problems caused by heavy drinking or certain types of cancer. It can also be a sign of a rare problem like an inherited bleeding disorder. If you notice someone has



bruises regularly, it may suggest serious problems in their home, like domestic violence.

Medications can also be a cause of excessive bruising. Almost any medication has the potential to change the way platelets work in the body, López says. Platelets are tiny, disc-shaped cells that play an important role in helping your blood clot.

"They're one of the things that stop you from bleeding," says López. Let your health care provider know if you notice bruising soon after taking a new drug.

Bruises may be a sign of a serious problem, but in most cases, they're harmless. See the Wise Choices box for signs that bruises may need to be checked out. ■



### Wise Choices

#### When To Get Your Bruise Checked Out

Talk with your doctor if you:

- get a large bruise or many smaller bruises without a known injury.
- have signs of infection. These can include streaks of redness around the bruise, oozing, or a fever.
- have a bruise that does not show signs of healing and fading.
- get a large or very painful bruise immediately after an injury. This can be a sign of a sprain or broken bone.
- bruise more easily or more frequently than you used to.
- notice bruising soon after taking a new drug.



### Definitions

#### Genes

Stretches of DNA you inherit from your parents that define features, like your risk for certain diseases.



### Web Links

For more about bruising, see "Links" in the online article: [newsinhealth.nih.gov/2022/01/bruising-questions](https://newsinhealth.nih.gov/2022/01/bruising-questions)



## Health Capsules

For links to more information, please visit our website and see these stories online.

### Retraining the Brain to Treat Chronic Back Pain

More than 25 million people in the U.S. live with chronic pain. This is pain that lasts for more than three months. The most common type of chronic pain is chronic back pain.

Often, no physical cause for this pain can be found. In these cases, it may stem from brain changes that persist after an injury healed. These brain changes provide a warning for you to restrict your movement and let the body recover. But in some cases, they can cause the pain to persist long after the damage has healed.

Researchers have developed a

treatment called pain reprocessing therapy (PRT) to help the brain “unlearn” this kind of pain. PRT teaches people to perceive pain signals sent to the brain as less threatening.

A research team performed the first clinical test of PRT. Participants had mild to moderate chronic back pain for which no physical cause could be found. The volunteers received one of three treatments: four weeks of intensive PRT, a harmless injection into the back, or continued standard care.

After four weeks, 66% of people

who received PRT reported being pain-free or nearly pain-free. Less than 25% of people who received injections and 10% of those receiving usual care reported similar improvements. Brain scans showed that people who received PRT had less pain-associated brain activity.

“This isn’t suggesting that your pain is not real or that it’s ‘all in your head,’” says Dr. Tor Wager of Dartmouth College, who co-led the study. “What it means is that if the causes are in the brain, the solutions may be there, too.” ■

### Thyroid Problems?

Your thyroid is a small gland in the front of your neck. It releases hormones that control how your body uses energy. These keep your organs running properly. But some people’s thyroids can be underactive or overactive and cause health problems.

When your thyroid doesn’t produce enough hormones to meet your body’s needs, it’s called hypothyroidism. This condition affects about 5 in 100 people age 12 and older. Most cases are mild or have few obvious symptoms. But hypothyroidism can cause

you to feel tired and gain weight. You may also feel cold and have a slowed heart rate.

An overactive thyroid, or hyperthyroidism, is less common. It affects about 1 in 100 people age 12 and older. This condition can cause weight loss despite an increased appetite and a rapid or irregular heartbeat. Hyperthyroidism can cause you to be nervous or irritable. You may have trouble sleeping. Left untreated, it can lead to heart problems.

Your doctor can diagnose a thyroid

problem based on your symptoms and on blood tests. These tests measure levels of thyroid stimulating hormone, or TSH, and may include thyroid antibody tests. Antibody tests can reveal whether your thyroid problem is caused by an autoimmune condition, in which your immune system attacks the thyroid.

Thyroid problems are more common in women and people older than 60. Talk with your doctor if you think you may have thyroid problems. To learn more, visit [go.usa.gov/x7P4](https://go.usa.gov/x7P4). ■



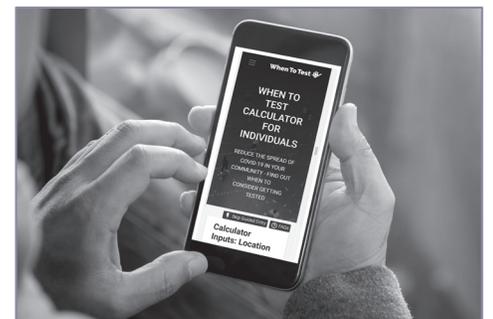
### Featured Website

When To Test for COVID-19

[whentotest.org](https://whentotest.org)

The When To Test calculator helps guide you on COVID-19 testing. The tool considers the level of disease in your area, vaccine

status, and personal habits. The website also includes tools to help organizations plan for and develop testing strategies.



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