

# NIH News in Health

National Institutes of Health · Department of Health and Human Services · [newsinhealth.nih.gov](https://newsinhealth.nih.gov)

**Inside News:** 3 Blepharitis 4 Eczema Treatment 4 Brain Donation 4 Bone, Joint, Muscle, and Skin Health for Kids

## Harmful Partnerships When Someone You Love is Abusive

Abuse can be difficult to see, especially when it's in your own relationship. It can start slowly, and it's not always physical. You may not realize that the small comments a loved one makes to you are doing harm. You may even make excuses for them. They're stressed from work or the pandemic.

But abuse takes many forms. It can be physical, like slapping, punching, or kicking. It can involve sexual violence. For many, it's psychological—making someone feel worthless or isolating them from friends and family. Sometimes it includes stalking.

All these behaviors are forms of domestic violence. This is sometimes called intimate partner violence. At least 25% of women and 10% of men are estimated to have experienced intimate partner violence.

“Intimate partner violence is about power and control,” says Dr. Eve Valera, an expert on domestic violence and brain injury at Harvard Medical School and Massachusetts General Hospital. “It’s any type of physical, emotional, or psychological violence from a partner or spouse, husband, a wife—or even an ex.”

Some people experience one act of partner violence. Others suffer repeated abuse over years. The effects from either can be long-lasting.

Researchers are working to understand and prevent intimate



partner violence and learn how to help those who have been affected.

**Signs of Partner Abuse** • It's important to recognize the signs of an abusive relationship. Controlling behavior is a common sign. Your partner may monitor where you are and how much you see friends and family. They might decide what you wear or eat or how you spend your money.

Verbal threats are also common. Other warning signs include name calling, humiliating someone in front of others, or blaming someone else for their own violent outburst.

Intimate partner violence affects the whole family. Children in homes where a parent is abused may be fearful and anxious. They can be afraid of conflict. They may also

often be on guard, waiting for violence to break out.

“The repercussions of intimate partner violence are huge. It’s just devastating to homes,” says Dr. Ted George, an NIH expert on alcohol and violence.

Heavy drinking is one risk factor for intimate partner violence. Studies show that partner abuse is much more likely on days of heavy alcohol use.

George studies the brain areas involved in loss of control and violence. His work has found that some people who commit domestic violence have fewer connections in the brain that slow down the

fight response.

Interventions that help people pause before they react may help prevent violence, says George. His findings also suggest that drinking may increase the risk of partner violence by affecting these same brain areas.

Other factors are also linked to committing partner violence. These include harmful use of drugs, having a personality disorder, and having abused a previous partner.

*continued on page 2*

**Subscribe** @



[newsinhealth.nih.gov](https://newsinhealth.nih.gov)

continued from page 1

**Understanding the Harms** • The harm from domestic violence isn't always visible. Experiencing it puts you at higher risk for a range of health conditions. These include heart disease, high blood pressure, digestive problems, and reproductive issues.

Intimate partner violence is linked to several mental health conditions like depression, post-traumatic stress disorder, and suicide. People who experience intimate partner violence are also more likely to binge drink and misuse other drugs.

Studies show that many people may suffer brain injuries as a result of physical abuse. Valera's research suggests that traumatic brain injuries are common. This is especially true for mild ones called concussions. They can have long-lasting effects on brain function.

Her team uses interviews, brain scans, and lab tests to look at abuse-related brain injury. They've found a relationship between the number of brain injuries and brain function. Brain injuries were linked with learning and memory problems and mental distress.

Valera notes that there are likely more women who sustain traumatic brain injuries from their partners than those with brain injuries from being an athlete or in the military. But these injuries usually go undiagnosed.

"The repetitive traumatic brain injuries that women often receive may not even be recognized as brain injuries, and are certainly not given appropriate care or treatment," she says.

Domestic violence can escalate with tragic results. In the U.S., women are more likely to be killed by a current or former intimate partner than by someone else.

If you're experiencing intimate partner violence, help is available. The Wise Choices box shows some of your options.

**Preventing Partner Violence** • So what's the best way to prevent intimate partner violence? Learn what to look for in a healthy relationship and how to build healthy relationship skills. It's important to start early.

People who have violent relationships as teens are more likely to have them as adults. Dr. Jeff Temple, an expert on teen dating violence at the University of Texas Medical Branch, teaches youth about building healthy relationships in a school-based program. He's been studying how well the program works.

In the program, students build relationship skills through role playing. They practice how to handle real-life situations, like apologizing or breaking up.

"Practice is huge for when they get into that situation in real life," Temple says. "What the research tells us is that kids who are able to resolve conflicts and manage their emotions are less likely to be in violent relationships later on."

He notes that no one is really



## Wise Choices Getting Help

If there is immediate danger, call 911. If there's no immediate danger, consider these options:

- **Get medical care.** If you have been injured or sexually assaulted, go to a local hospital emergency room or urgent care center.
- **Find out where to get help in your community.** Visit [www.thehotline.org/get-help/local-resources](http://www.thehotline.org/get-help/local-resources).
- **Call a helpline for free, anonymous help.** Call the National Domestic Violence Hotline at 800-799-SAFE (7233) or 800-787-3224 (TDD). They can help you develop a safety plan. They also offer guidance on how to keep children safe and can help you find legal advice.
- **Talk to someone.** Reach out to someone you trust for emotional support.

taught how to be in a healthy relationship, even though it's a basic part of being human. We practice reading, writing, sports—everything except relationships.

"So we learn about relationships through friends, which is sometimes okay, oftentimes poor. We learn from the media, which is not that great," Temple says.

Ultimately, most of us learn about relationships through trial and error. Programs like the one Temple is studying can teach teens to build healthy, happy relationships.

But learning about healthy relationships can help at any age. Read more about building relationships at [newsinhealth.nih.gov/2018/04/building-social-bonds](http://newsinhealth.nih.gov/2018/04/building-social-bonds). ■

## NIH News in Health

ISSN 2375-6993 (Print) ISSN 1556-3898 (Online)

**Editor** Harrison Wein, Ph.D.

**Managing Editor** Tianna Hicklin, Ph.D.

**Graphics** Alan Defibaugh (illustrations),  
Bryan Ewsichek (design)

**Contributors** Erin Bryant and Sharon Reynolds

Use our articles and illustrations in your own publication. Our material is not copyrighted. Please acknowledge *NIH News in Health* as the source and send us a copy.

[newsinhealth.nih.gov](http://newsinhealth.nih.gov)



**National Institutes of Health**  
NIH...Turning Discovery Into Health®

Office of Communications & Public Liaison  
Building 31, Room 5B52  
Bethesda, MD 20892-2094  
email: [nihnnewsinhealth@od.nih.gov](mailto:nihnnewsinhealth@od.nih.gov)  
phone: 301-451-8224



**Web  
Links**

For more about intimate partner violence, see "Links" in the online article: [newsinhealth.nih.gov/2020/12/harmful-partnerships](http://newsinhealth.nih.gov/2020/12/harmful-partnerships)

# Eyelid Trouble?

## Managing Blepharitis

You probably don't give your eyelids much thought. But many conditions can irritate them.

One of the most common issues is called blepharitis. Blepharitis is an **inflammation** of the eyelid. It can affect the inside or the outside of the skin that lines the eyes.

The condition can make your eyelids red, swollen, irritated, and itchy. It can also cause crusty dandruff-like flakes to form on your eyelashes. Though rarely dangerous, blepharitis may cause discomfort and pain.

The main cause of blepharitis is extra growth of the normal bacteria found on your skin. Other conditions, including allergies, **rosacea**, certain mites, dandruff, or oily skin can increase the risk of this bacterial overgrowth.

Blepharitis can lead to other eye problems. Common ones include a stye, which is a red, painful bump on

the eyelid caused by a blocked oil gland. A chalazion is like a stye, but doesn't hurt, though it can make your eyelid swell and turn red. Very rarely, blepharitis can cause damage to the cornea—the clear outer layer at the front of your eye.

Blepharitis often contributes to another common eye problem called dry eye. In this condition, oil and flakes alter the thin layer of tears that sits across the surface of your eye. This can make your eyes feel dry.

But some people's eyes instead feel watery or teary because their tears aren't working correctly. That's because of inflammation on the eye's surface.

"Patients with dry eye tell me that their eyes water all the time, especially in windy environments," explains Dr. Jason Nichols, an eye doctor who studies dry eye diseases at the University of Alabama at Birmingham.

Once someone develops blepharitis, it never totally goes away. But flare ups can be managed and prevented.

Most people can keep the condition in check with good eyelid hygiene. See the Wise Choices box for easy tips on eyelid care.

"But people have to be consistent and clean their eyes daily," says Nichols.

Some people with blepharitis may be prescribed antibiotics. Others need medications to reduce inflammation or keep their eyes moist.

If you have recurring irritation of your eyes or your eyelids, Nichols says, "see an eye care provider, and make sure you get an accurate diagnosis."



Nichols' research team is working on developing imaging and other methods to look closely at the surface of our tears and oil glands in the eyes. This may help them better understand what happens when the eyelids get irritated.

"We often take our eyes for granted, but when things go wrong, it really does have an impact on quality of life," Nichols says. ■

## Definitions

### Inflammation

Heat, swelling, and redness caused by the body's protective response to injury or infection.

### Rosacea

A skin condition that can cause redness, bumps, pimples, or a warm or burning feeling on the face.



## Wise Choices

### Eyelid Care

Steps for cleaning your eyelids when you have blepharitis:

- Wash your hands with soap and water.
- Mix warm water with a gentle cleanser on a soft washcloth.
- Press the cloth against your closed eye for a few minutes to loosen crusts. This can also help keep your oil glands from clogging.
- Gently rub the cloth back and forth, focusing on the area where your eyelashes meet your eyelids.
- Rinse your eye with clean water.
- Commercially available eyelid cleaning wipes and non-allergenic makeup removal wipes are also available.



## Web Links

For more about blepharitis, see "Links" in the online article: [newsinhealth.nih.gov/2020/12/eyelid-trouble](https://newsinhealth.nih.gov/2020/12/eyelid-trouble)



## Health Capsules

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

### Bacteria Treatment Improves Children's Eczema

Children with a skin disease called eczema benefited from an experimental treatment with live bacteria. The treatment improved skin symptoms in children as young as three years old.

Eczema can cause dry, itchy skin and rashes. Studies have shown that germs on the skin, like bacteria, may play a role in the condition. People with eczema often have a different balance of bacteria than those with healthy skin.

Researchers tested live bacteria as a treatment for eczema. They used bacteria found naturally on the skin

called *Roseomonas mucosa*.

Twenty children were enrolled in the study. Their ages ranged from three to 16 years. A solution with the live bacteria was sprayed onto their skin where they had a patch of eczema. It was applied twice weekly for three months. Then, every other day for another month.

Almost all of the children showed more than 50% improvement in their symptoms after the treatment. Most needed less medicine to manage the condition. They also reported less itching and a better quality of life.

The scientists found improve-

ments in the skin's ability to seal in moisture. The treatment also helped keep out substances that can cause allergic reactions.

"Most children in the study experienced substantial improvements in their skin and overall wellbeing following *R. mucosa* therapy. Encouragingly, the bacteria stayed on the skin and continued to provide benefit after therapy stopped," says NIH researcher Dr. Ian Myles, who led the study.

The treatment is now being further studied in a larger group of children, as well as adults. ■

### Donate Your Brain for Research

Your brain lets you think, feel, move, and breathe. But when something goes wrong, it can cause devastating disorders. Brain donations help researchers study brain disorders that affect millions of people.

Scientists need donations from both people who had a brain disorder and those who were healthy. These donations help researchers learn about brain injuries and diseases like Alzheimer's disease. A better understanding of brain disorders may bring new treatments in the future.

Anyone over 18 can choose to donate their brain. Scientists need brains from diverse groups. It's important to study brain diseases in many populations.

One donated brain can make a huge impact. It could provide information for hundreds of studies.

If you're considering brain donation, note that being an organ donor on your driver's license is different. Brain donation is a separate process.

First, talk with your family and friends. Let them know early in your

decision-making process. This may reduce stress and misunderstandings at the time of donation.

You might also consider enrolling in a clinical study. Researchers learn the most from the brains of people who participate in studies while they're still alive. This lets them track changes in memory, thinking, language, and behavior over time.

You can learn more about why and how to donate your brain at [www.nia.nih.gov/braindonation](http://www.nia.nih.gov/braindonation). ■



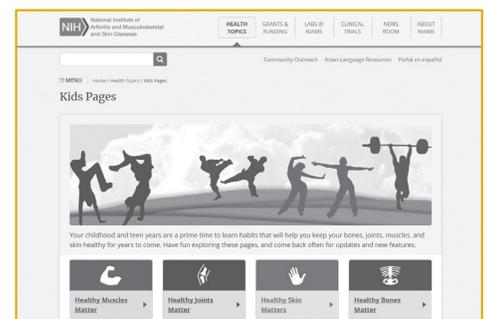
### Featured Website

Bone, Joint, Muscle, & Skin Health for Kids

[www.niams.nih.gov/health-topics/kids](http://www.niams.nih.gov/health-topics/kids)

It's important to take care of your bones, joints, muscles, and skin as you grow. They keep your body strong and moving well.

Kids and teens can find information about how these body systems work and tips for keeping them healthy.



## How to get NIH News in Health

Subscribe online.  
Visit [newsinhealth.nih.gov](http://newsinhealth.nih.gov)

Subscribe

Get it in print.

Contact us (see page two) to get print copies free of charge by mail for display in offices, libraries, or clinics within the U.S.

