

# NIH News in Health

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## Addressing Childhood Bullying When Peer Aggression Goes Too Far

Most people have felt picked on, put down, or left out by peers at some point in their life. Conflict between children, even friends, can be a normal part of development. But some aggressive behaviors cross the line into bullying.

“Bullying is a type of aggression,” says Dr. Jamie Ostrov, a psychologist who studies child development at the University at Buffalo. “But not all aggression is bullying.”

For behavior to be considered bullying, it must feature two things, Ostrov explains. One is a power imbalance between the child doing the bullying and the child being bullied. That imbalance can stem from differences in physical strength, popularity, or other things.

The second is repetition. That is, the behavior happens more than once or creates the fear that it may keep happening.

Bullying can be physical, like hitting or kicking. It may involve damage to property, like schoolbooks or electronics. It can be verbal, like name calling or teasing. And it can be social, such as spreading rumors or excluding someone from a group. These behaviors can happen in person or online.

Being bullied is a common experience. More than 1 in 4 children in middle school report being bullied in person. And 1 in 5 high school students are bullied every year.



Bullying can have life-long consequences. NIH research is yielding new insights into how to prevent and stop bullying behaviors.

**A Cycle of Hurt** • Kids who are seen as different from their peers in some way are more likely to be the target of bullying behaviors. Being bullied can cause lasting harm. Kids who experience bullying are at higher risk for mental health conditions, like depression and anxiety, and for dropping out of school.

The reasons why some kids bully others are numerous. Some kids who bully may be dealing with aggression or violence at home. Others may struggle with social skills and have trouble understanding others' emotions. Some may bully to fit in or gain social status.

Being bullied can sometimes start a cycle of bullying. Kids who are bullied will often go on to bully others.

“Victims learn from those experiences and can become the aggressors,” Ostrov explains. This puts them at risk for other problems, too.

Kids who engage in bullying in elementary and middle school are more likely to develop other harmful behaviors as they get older, says Dr. Dorothy Espelage, a psychologist who studies peer aggression at the University of North Carolina.

“They have the greatest odds of engaging in sexual harassment and sexual violence later on,” she explains.

Kids who bully also have an increased risk of mental health conditions and problems in school, adds Ostrov. And those who are both bullied and bully others are at the greatest risk for mental health conditions and school behavior problems.

**Stepping In** • What can you or your kids do if a child is being bullied? For kids who witness bullying, speaking up in the moment can feel risky, says

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Dr. Michele Ybarra, a child mental health expert at the Center for Innovative Public Health Research.

“Kids don’t want to be the next target—that’s a real fear,” she says.

But there are other things kids can do if they want to help someone. “If it feels too big, too scary, and not safe for a child to speak up when they witness bullying, then maybe they can get a group of their friends who, together, can stick up to the bully. Or see if a trusted adult can help,” she explains.

Kids can also do other things to offer support, Ybarra adds, “like sitting with the person who was bullied at lunch. Or just saying something nice to them at their locker can sometimes make a big difference.”

While parents may want to confront a child who is bullying their kid, or the parents of the child who is doing the bullying, “that can also escalate problems,” says Ostrov. “It’s better to calmly but assertively report the incidents to the school.”

He also recommends listening to your children and being careful not to dismiss their concerns. You can also try roleplaying with your kids to

practice how to respond when being bullied.

“Roleplaying with children to help them figure out how to solve these situations can really have an impact,” he says.

A lot of bullying happens face to face. But it is happening online more and more. This is called cyberbullying. Cyberbullying isn’t much different from in-person bullying, Ostrov says. It’s just happening in a different place. And they often occur together.

“What’s happening online typically mirrors what happens offline, and vice versa,” Ostrov says.

Cyberbullying can happen through email, text messaging, social media, and even chat rooms in online video games. Parents may have no idea their child is being bullied online.

For signs that a child may be experiencing bullying, see the Wise Choices box. You can learn more about responding to bullying at [StopBullying.gov](http://StopBullying.gov).

**Preventing Bullying** • Ybarra and Espelage are testing a new anti-bullying program for schools to use. For their study, they’re sending texts about how to handle bullying to kids outside of school hours.

“This way, kids get to interact with the content on their phone, on their own, when and where it’s safe for them,” Ybarra explains.

The research team is currently testing a nine-week program in a group of middle-school students. The program is designed to increase social and emotional skills. First, the team is testing whether kids will use the program. Next, they want to see if it leads to a decrease in bullying behaviors.

Ostrov’s team is testing a program for a very different group of kids—those still in preschool. The team has built a program for classrooms that uses puppets to let kids practice problem solving and making friends.

Study results have shown that this program can help decrease harmful behaviors, like hitting and kicking, and increase positive social behaviors, like helping and including others.

Ostrov’s team is now developing and testing a version of the program for teachers to use, along with coaching from the research team. Their hope is that teachers will eventually be able to use the program on their own, without support from the researchers.

“We want to try to change bullying behavior as early as possible,” Ostrov says. “The earlier we do that, the less likely it is for kids to get into these cycles that may have negative consequences later.” ■



## Wise Choices

### Warning Signs a Child Is Being Bullied

- Unexplained injuries.
- Lost or destroyed clothing, books, or electronics.
- Frequent headaches or stomach aches, feeling sick, or faking illness.
- Changes in eating habits.
- Trouble sleeping or frequent nightmares.
- Declining grades or loss of interest in school.
- Hiding their device or screen when others are near.
- Avoiding discussions of what they’re doing on their device.
- Sudden loss of friends or avoidance of social situations.
- Expressing feelings of helplessness or negative thoughts about themselves.
- Self-destructive behaviors, including talk of suicide.

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

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

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

**Contributors** Vicki Contie, Sharon Reynolds, and  
Myranda Tarr

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

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



**Web  
Links**

For more about childhood bullying and an online-only Q&A, see “Links” in the online article: [newsinhealth.nih.gov/2023/09/addressing-childhood-bullying](http://newsinhealth.nih.gov/2023/09/addressing-childhood-bullying)

# Recognizing POTS

## Learn to Spot This Mysterious Condition

A condition called POTS can have a huge impact on a person's life. People with POTS often feel lightheaded or dizzy when standing up from a lying position. Their heart tends to race. They may even faint. Other symptoms can include extreme fatigue, shortness of breath, and trouble thinking.

"POTS can be quite debilitating. It can make it hard to do everyday activities, like attending work or school," says Dr. Cheryl L. McDonald, who helps oversee NIH's POTS research programs. "Some people even require the use of a wheelchair because they can't stand or walk for long periods."

POTS is an abbreviation for Postural Orthostatic Tachycardia Syndrome. Postural means it's linked to your body's position.



### Wise Choices

#### Common Signs of POTS

POTS symptoms vary, which makes it hard to diagnose. People may have some or many of these symptoms:

- Racing heart and lightheadedness when going from lying down to standing.
- Reddish-purple color in feet or legs.
- Heart palpitations, or feeling your heart pounding or racing.
- Shortness of breath.
- Weakness and fatigue.
- Severe headache.
- Digestion-related problems, such as nausea, constipation, or vomiting.
- Poor concentration or confusion.
- Trouble sleeping.
- Blurred vision.
- Trouble exercising.

Orthostatic is related to standing. Tachycardia means rapid heart rate. And syndrome means it's a group of symptoms. (See the Wise Choices box.)

Normally, when a person stands up, gravity pulls blood down toward the legs and feet. This briefly reduces blood flow to the upper body, including the heart and brain. So the brain immediately sends signals that tighten the body's lower blood vessels and make the heart pump faster. This pushes blood upward, so it can travel throughout the body.

But for people with POTS, these signals break down. The lower blood vessels don't tighten enough upon standing, and the heart beats much faster than it should. The brain and other organs may not get enough blood, which can lead to fainting and other symptoms.

POTS can affect anyone at any age. It is most common among women, ages 15 to 50. Its causes are unknown. Researchers suspect there can be different causes, and each might require different treatments. Some data suggest that POTS may arise after major surgery, head injury, pregnancy, or viral illness.

POTS can be diagnosed by looking at your symptoms, heart rate, and blood pressure when you go from lying down to standing. Adults might have POTS if their heart rate rises by more than 30 beats a minute within 10 minutes of standing, without a big blood pressure change. For those under age 20, an increase of at least 40 beats a minute without a major blood pressure change could signal POTS. Symptoms may quickly improve by lying down.

Treatment often involves increasing salt intake and drinking plenty of water, which can boost blood volume. Blood volume is the total



amount of fluid circulating around your body. Some patients benefit from medications that help to raise blood pressure or reduce heart rate. Compression socks can help keep blood from pooling in the legs. Exercise training and maintaining a regular sleep schedule may also help.

Many people—even some health care providers—have never heard of POTS. "But awareness has increased in recent years, particularly since POTS has been seen in patients who have had COVID-19," McDonald says. The links between POTS and COVID-19 are still unclear, and researchers are working to learn more.

Despite increased awareness of POTS, it can be hard for some patients to get a diagnosis. "If you have symptoms that look like they could fit with POTS, it's a good idea to discuss the possibility with your doctor," McDonald says. "It's perfectly acceptable to be your own advocate. You can show an article to your doctor and ask: Do you think I might have POTS?" ■



### Web Links

For more about POTS, see "Links" in the online article: [newsinhealth.nih.gov/2023/09/recognizing-pots](https://newsinhealth.nih.gov/2023/09/recognizing-pots)







## Health Capsules

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

### How Football Raises the Risk for Brain Injury

Brain injuries can arise from hits to the head during contact sports like football or soccer. Repeated brain injuries can lead to a condition called chronic traumatic encephalopathy, or CTE. CTE is a serious issue for American football players. It can lead to dementia later in life and even premature death.

An NIH-funded research team is working to learn which types of head impacts are most risky. They looked at data from earlier studies that used specialized helmets to measure head impacts during football games. These studies included youth, high

school, and college games.

From these data, the scientists estimated the number and types of head impacts that different players might have each season. They compared this data with CTE diagnoses from more than 600 former football players.

The team found that the risk of having CTE varied by the person's highest level of play. It also increased the longer a person played football. For each additional year of play, the risk of CTE rose by 15%. The type and force of head impacts were also stronger predictors of CTE risk

than the number of hits to the head a player experienced. In contrast, the number of reported concussions were not linked with CTE. Concussions are hits to the head that result in signs or symptoms of brain injury.

"This study suggests that we could reduce CTE risk through changes to how football players practice and play," says study co-lead Dr. Daniel Daneshvar of Mass General Brigham. "If we cut both the number of head impacts and the force of those hits in practice and games, we could lower the odds that athletes develop CTE." ■

### Weather Extremes and Your Health

Weather affects where we live, what we do, and when we can do it. It can also impact our health. Temperature extremes, hot or cold, can harm our bodies in different ways. Harsh conditions and storms may lead to other health dangers, too.

Over the last few years, wildfires began increasing in frequency and size. Smoke from wildfires contains a mix of complex chemicals, and exposure can cause breathing problems. This hazardous smoke can

travel long distances from where a wildfire starts. And when fires reach areas where people live, various other chemicals often enter the mix.

Children are especially vulnerable to wildfire smoke. Studies have shown that kids exposed to higher levels of air pollution have reduced lung function and growth. These issues can lead to other problems, like asthma or lung disease, later in life. Because kids are still growing and developing, their bodies are also more

vulnerable to the effects of toxins.

There is plenty you can do to reduce the risks of smoke exposure. Check air quality reports daily at [AirNow.gov](https://airnow.gov). Keep your windows closed on bad air days. You may want to consider air filters and purifiers to limit your exposure indoors. If you need to be outdoors when air quality is poor, consider wearing a medical or surgical mask. Learn more at [go.nih.gov/NIHNiH-Sep23-Weather](https://go.nih.gov/NIHNiH-Sep23-Weather). ■



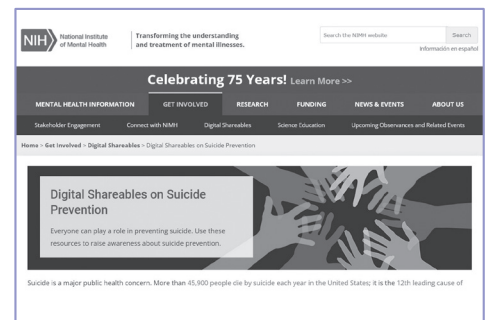
### Featured Website

Digital Shareables on Suicide Prevention

[nimh.nih.gov/shareNIMH/suicideprevention](https://nimh.nih.gov/shareNIMH/suicideprevention)

Everyone can play a role in preventing suicide. Help spread the word about how to make a difference. Share these graphics

and multimedia messages about the warning signs of suicide and how to get help for someone in crisis.



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