

NIH News in Health

National Institutes of Health • Department of Health and Human Services • newsinhealth.nih.gov

Inside News: 3 Preventing Falls 4 Artificial Light and Sleep 4 Migraine Trainer App 4 STEM Teaching Resources

Teen Suicide

Understanding the Risk and Getting Help

Teenagers have their whole lives ahead of them, they're often told. The idea that a teen could be thinking about ending that life might be hard for their friends, families, or other people in their community to believe.

But the risk of suicide should be on the radar of anyone who interacts with teens, says Dr. Jane Pearson, a mental health expert at NIH.

The rate of teen suicide has increased over the last decade.

Suicide is now the second leading cause of death for teens and young adults in the United States.

Experts don't know why this rate has been rising. But NIH-funded researchers are working on better ways to find and help teens who are thinking of suicide.

"There are some very effective treatments for youth who are suicidal," Pearson explains. "We're trying to figure out how to make those treatments more accessible for more youth."

Who's at Risk? • Many things can increase the risk of suicide in teenagers. One major risk factor is experiencing a mental health issue like depression, anxiety, or trauma. Most people who die by suicide have struggled with a mental health condition.

Other risk factors include a family history of suicide, violence,



or substance abuse. Teens also experience many stressful life events for the first time. These can include a breakup with a romantic partner, trouble at school, violence, or conflicts with friends.

"Teens don't have the life experience to know that these things will be temporary, that they'll get through it," Pearson says. And they might think they'd rather be dead than feel the way they do at that moment in time, she adds.

Persistent misunderstandings about suicide can also keep teens from getting the help they need, adds Pearson.

"Many people think that a teen talking about or attempting suicide are so-called gestures, or cries for attention," Pearson explains. They don't think that the teen is in real danger.

"That's definitely a myth," says Dr. Cheryl King, a suicide-prevention

researcher at the University of Michigan. "If someone has been repeatedly suicidal or talking about it for a long time, that should have us more concerned rather than less concerned."

Knowing When Teens Need Help • Some of the warning signs that a teen is thinking about suicide are talking about wanting to die, feeling hopeless, or being trapped or in unbearable pain (see the Wise Choices box for more signs).

If you are concerned about a teen who may be thinking about suicide, start a conversation, says Dr. Joan Asarnow, a suicide-prevention researcher and clinical psychologist at the University of California, Los Angeles.

"A conversation can just start with 'are you OK?' or 'is there something that feels like it's too big of a problem?'" Asarnow explains.

Pearson recommends that people start these conversations early, when they first start to feel that something's wrong with a teen. "It's

continued on page 2

Subscribe @



newsinhealth.nih.gov

continued from page 1

going to be easier to help somebody before they've really decided on a course of action to kill themselves," she says.

But many teens have suicidal thoughts that go unrecognized. King and other NIH-funded researchers are studying ways to better identify teens at risk of suicide.

King is testing a new method to screen teens who come into hospital emergency rooms for suicide risk. While most teens don't see a mental health specialist, she says, "roughly 1 in 5 goes to the emergency department at least once a year. So, it's a particularly good place for suicide-risk screening."

This is especially true because risk-taking behaviors such as substance abuse and dangerous driving can land teens in the emergency room, King explains. And teens who engage in such behaviors are at higher risk of suicide.

Other researchers are looking at ways to use technology to identify when teens already known to be at risk of suicide are most vulnerable. For example, one team is testing whether smartwatches can

detect when teens' emotions are affecting their body before the teens themselves feel distressed.

"New technologies may provide us with a way to intervene at the moment where the kids really need it, without depending on them to reach out on their own," Asarnow explains.

Keeping Teens Safe • Treatments are available that can help teens at risk of suicide. "Underlying mental health issues like depression and trauma are treatable conditions, and there are ways we can help youths with these troubles once we know about them," says King. Talk therapy and medications can both be effective for many people.

NIH-funded researchers have also developed therapies that can help very high-risk teens—those who have already attempted suicide, sometimes more than once.

Asarnow and her colleagues recently showed that types of intensive counseling for teens and their families can reduce the risk of another suicide attempt by about a third. This counseling, based on treatments called cognitive behavioral therapy (CBT) and dialectical behavior therapy (DBT), teaches coping strategies and life skills.

Involving the family in suicide prevention seems to be more effective than just treating the teen, Asarnow says. Her program counsels and teaches parents as well as the teens in their care.

One thing any family can do to help protect a teen thinking of suicide is to talk with a health care provider about putting together a safety plan, she adds. A safety plan is a document the teen and trusted adults create together. It includes coping strategies and contact information for people who have agreed to help in times of crisis.

A safety plan also includes commitments from the family to



Wise Choices Suicide Warning Signs

The more warning signs, the greater the risk of suicide.

- Talking about wanting to die
- Looking for ways to kill oneself
- Talking about feeling hopeless or having no purpose
- Talking about feeling trapped or in unbearable pain
- Talking about being a burden to others
- Abusing alcohol or drugs
- Acting anxious, agitated, or reckless
- Having trouble sleeping
- Withdrawing or feeling isolated
- Having extreme mood swings
- Giving away belongings, including treasured objects

Get your teen help from a mental health professional or call the National Suicide Prevention Lifeline at 1-800-273-TALK. You can also text "HOME" to the Crisis Text Line at 741741.

keeping the teen's environment safe, such as limiting access to medications and firearms.

The decision to harm oneself is often made in a split second. A safety plan "makes the best decisions the easy things to do," Pearson explains. "The family wants that, and the teen wants that."

If you or someone you know is thinking about suicide, you can call the National Suicide Prevention Lifeline at 1-800-273-TALK. You can also text "HOME" to the Crisis Text Line at 741741. Experts recommend both parents and teens store these numbers in their smartphones. ■

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 Geri Piazza, Sharon Reynolds, and
Claire Rutkowski

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



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
phone: 301-451-8224



**Web
Links**

For more about preventing teen suicide, see "Links" in the online article: newsinhealth.nih.gov/2019/09/teen-suicide

Preventing Falls

Tips to Keep You on Your Feet

Each year millions of Americans, especially older adults, go to the emergency department after an injury from a fall.

“These falls can cause serious injuries—back fractures, hip fractures, as well as head trauma,” says Dr. David B. Reuben, a healthy aging expert at the University of California, Los Angeles, who co-leads one of the largest prevention studies for falling. Some people are never able to return to their way of life before an injury.

Several kinds of health care providers can help those at risk of falling. “It’s actually a group effort,” Reuben says. Your doctor can be the first step. They can develop a prevention plan and refer you to other types of providers if needed.

The biggest risk factor for being injured from a fall is being age 65 or older. People younger than that may be at increased risk of falling when they engage in certain activities, like

sports, or because of certain health conditions. But children and young adults typically fall without being seriously injured.

People with weak bones are more likely to break a bone during a fall. As you get older, your bones become less dense. They get thinner and more spongy. If that goes too far, it’s called osteoporosis. Osteoporosis makes your bones fragile. Having enough calcium and vitamin D can help keep your bones strong. So can getting treatment for osteoporosis if needed.

Other risk factors include finding it challenging to walk or keep your balance. Problems with foot pain or unsafe shoes can make these more difficult. And certain medicines you’re taking might cause you to feel tired or woozy. Some people have a drop in blood pressure when they stand up. That can make you feel dizzy and fall.

As you age, your eyesight, hearing, and reflexes may not be as sharp as they once were. Those changes can make it more likely you’ll stumble and fall. For older adults who have already fallen, the risk of falling is much greater.

See the Wise Choices box for ways to lower your risk of falling. Your doctor can help you make a personalized plan for preventing falls. They may encourage you to work with a physical therapist to increase your strength and improve your balance. They can also prescribe devices like special footwear or a walking cane.

Your plan for preventing falls may include getting more physical activity. Studies have shown that both individual and group exercise classes can help older adults



prevent falls. Research suggests that this is true even for people 65 and older who are at higher risk of falls only because of their age.

You may also want to fall-proof your home. An occupational therapist can teach you about the safety hazards in your home. Keep your home tidy and well-lit to avoid stumbling over objects. Also, avoid having small area rugs that you could trip on. Making a habit of holding onto the handrails when you use stairs can keep you safer, too.

If you fall, it’s important to tell your doctor, especially if you’re an older adult. “This is something that you really want to pay attention to,” Reuben advises. Your doctor can help you make changes in your life to prevent another fall. ■



Wise Choices

Lower Your Risk of Falling

- Talk openly with your health care provider about falls.
- Find out about the side effects of any medicine you take.
- Stay physically active to improve your balance and strength.
- Have your eyes and hearing checked regularly.
- See your health care provider about any foot problems. Make sure to discuss proper footwear.
- Make your home safer. Remove things you can trip over from stairs and walkways. Have grab bars and non-slip mats in bathrooms.
- Hold on to handrails when using stairs.



Web Links

For more about preventing falls, see “Links” in the online article: newsinhealth.nih.gov/2019/09/preventing-falls



Health Capsules

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

Sleeping With Artificial Light Linked to Obesity

Sleep is important for your physical and mental health. A lack of quality sleep increases your risk for certain health conditions, including obesity. A recent study found that sleeping with an artificial light on may also raise your risk of weight gain and obesity.

Your body uses light to control your sleep cycle. The natural light pattern from the sun helps you stay awake during the day and sleep at night. But you can also be exposed to light at night in many ways, such as a room light, streetlight, television,

or mobile device. That may disrupt your sleep.

Researchers asked over 43,000 women, ages 35–74, whether they slept with no light, a small night-light, light outside the room, or a light or television on in the room. The women also gave their height, weight, body mass index, and waist and hip sizes. After about five and a half years, scientists gathered the women's new measurements.

Women who slept with a light or television on were 17% more likely to have gained about 11 pounds or

more during the study. Light from outside the room had less of an impact. Women who slept with a small nightlight or no light had no difference in weight gain.

Other factors may have also contributed to the weight gain, but the researchers took any known factors into account. “Unhealthy, high-calorie diets and sedentary behaviors have been the most commonly cited factors to explain the continuing rise in obesity,” says NIH researcher Dr. Yong-Moon (Mark) Park. ■

Migraine Trainer

Have you ever had a migraine? A migraine is a headache that causes a throbbing pain on one or both sides of your head. Migraines can be very severe and may cause other symptoms like nausea, weakness, and sensitivity to noise and light.

Your migraines may seem random, but there are many factors that might cause them, including stress, certain foods, and too much or too little sleep.

Take control of your migraines

with NIH's new app called “Migraine Trainer.” Designed for teens 13 and older, the app can help you find out what causes your migraines. This can help you and your health care provider come up with a personalized plan for managing them.

You can take note of when your migraines happen, how long they last, and where the pain is. You can also mark down how much sleep, exercise, and water you had before

the migraine started.

Tracking your habits can help you discover what leads to your migraines and what's helped get you through them. “Migraine Trainer” also offers tips for dealing with the pain of migraines.

Take migraines into your own hands by downloading the app for free to your iOS or Android mobile device. To find the links, you can visit www.ninds.nih.gov/disorders/brain-life. ■



Featured Website

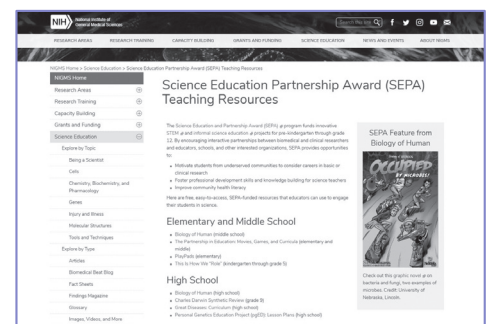
STEM Teaching Resources

www.nigms.nih.gov/education/sepa-teaching-resources

Inspire students between pre-kindergarten and 12th grade to pursue the world of science. Find links to free teaching resources like comic books, lesson plans,

games, videos, and more.

Discover and share the vast health-related teaching resources supported by NIH.



How to get NIH News in Health

Subscribe online.
Visit 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.

