

# NIH News in Health

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## Nurture Your Resilience Bouncing Back From Difficult Times

Everyone goes through tough times in life. But many things can help you survive—and even thrive—during stressful periods. There's no one-size-fits-all approach. Learning healthy ways to cope and how to draw from resources in your community can help you build resilience.

“Resilience is the extent to which we can bounce back from adverse events, cope with stress, or succeed in the face of adversity,” says Dr. Cindy Bergeman, a psychology professor at the University of Notre Dame.

You're not born with resilience. “It's not something you either have or don't have,” says Dr. Alexandra Burt, a child development expert at Michigan State University.

“Resilience is a process in which many factors—including family, community, and cultural practices—interact. It boosts wellness and protects you from risks to your well-being. For many people, these risks are compounded by hardship and discrimination,” adds Dr. Lisa Wexler, who studies suicide prevention at the University of Michigan.

Researchers are studying what helps people become more resilient. Creating healthy habits and taking care of yourself can help. And so can family, friends, and your connection to community and culture.

**Finding Your Strengths** • Stress can cause wear and tear on the body and brain. Chronic stress has been



linked to an increased risk of many health conditions. These include heart disease, high blood pressure, depression, and anxiety.

Many stressful situations can't easily be changed by one person. And some—such as parenting or a challenging job—can be things you want to do, even if they're taxing.

But resilience isn't just about eliminating stress. It's also about tapping into your strengths. Researchers call these protective factors. “They can buffer stress or directly promote well-being—and sometimes even do both,” Wexler says.

Your strengths include those of your neighborhood and community. Different cultures have developed different ways to help people cope. The ceremonies, teachings, and cultural practices that are meaningful to you can help, Wexler says.

Other protective factors involve nurturing your body. “Being able to

manage your stress is key to what underlies resilience. And a healthy body is going to deal with stress much better,” says Bergeman.

Other tools are emotional, like expressing your feelings rather than bottling them up, she explains. Looking at problems from different angles can help, too.

“Can you see a difficulty in a more positive way?” Bergeman asks. “For example, you can look at a stressful situation as a growth opportunity instead of thinking

of it as a threat. Ask yourself: What can I learn from this situation?”

Meeting your own needs also makes a difference. “We're often so busy trying to take care of other people that we don't do good self-care. I encourage people to do something that they enjoy every single day. Many people feel guilty about that. But it really helps us replenish our emotional reserves, just like a meal fills our physical reserves,” says Bergeman.

In times of stress, self-care can be the opposite of selfish. Adults who

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take time for themselves can better help nurture resilience in children, says Burt. “One of the best things any parent can do for their child is to be well and healthy themselves. That makes it a lot easier for you to provide the support your child needs.”

**Tapping Into Resources** • Another part of resilience is about using the resources available to you. More and more, researchers are understanding that resilience doesn’t happen in a vacuum.

“The presence of resilience in a person is related to the supports around them,” Burt says. For example, she and her team found that growing up in a very impoverished neighborhood can change the way a child’s brain develops. But when adults in the community work together to support and monitor neighborhood children, it helps protect the children’s brains despite their circumstances. “A child can be resilient because they have these resilience-promoting things around them,” Burt explains.

Supportive adults don’t have to be a parent or relative, Burt says, though they often are. Some kids

don’t have supportive families.

“That supportive person can also be a teacher, or someone else who’s important to them. Just one person who they really feel has their back,” she says.

Wexler is part of the NIH-funded Alaska Native Collaborative Hub for Research on Resilience (ANCHRR). This is a group of researchers working with local community leaders. They are studying which cultural strengths help protect Alaska Native young people from suicide.

Many protective factors for these young adults come from their community’s culture. “Access to cultural resources combined with the ability to use them is what helps lower suicide risk,” says Dr. James Allen from the University of Minnesota.

ANCHRR is also looking at how the cultural and spiritual practices that Alaska Native communities harness work to protect youth against the suicide and other risks they face.

**Choosing Your Tools** • The tools that best help you offset stress can differ from situation to situation, says Bergeman.

“Sometimes you have a stressor where you need to take action and solve the problem. But for other types of stressors, maybe you need emotional support,” she says. “A way to think about resilience may be: How do you match what you need with the kinds of tools that you have?”

In a way, practice makes perfect, Bergeman says. Keep tabs on what felt helpful to you during stressful times. Ask yourself: How did you deal with it? Did you choose a healthy strategy? How might other people have helped you deal with it?

“That can prepare you for the next experience that may be more difficult,” Bergeman says. ■



## Wise Choices Building Resilience

Nurturing your body, brain, and social connections can help you bounce back from stress.

- **Develop healthy physical habits.** Healthy eating, physical activity, and regular sleep can improve your physical and mental health.
- **Take time for yourself.** Make taking care of yourself part of your daily routine. Take time to notice the good moments or do something that you enjoy, like reading a book or listening to music.
- **Look at problems from different angles.** Think of challenging situations as growth opportunities. Try to see the positive side of things. Learn from your mistakes and don’t dwell on them.
- **Practice gratitude.** Take time to note things to be thankful for each day.
- **Explore your beliefs about the meaning and purpose of life.** Think about how to guide your life by the principles that are important to you.
- **Tap into your social connections and community.** Surround yourself with positive, healthy people. Ask friends, family, or trusted members of your community for information or assistance when you need it. Look for cultural practices that you feel help in times of stress.
- **Get help for mental health and substance use disorders.** Talk with a health care professional if you’re having trouble coping. Or call SAMHSA’s free national helpline at 1-800-662-HELP. 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.

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Links**

For more about resilience, see “Links” in the online article:  
[newsinhealth.nih.gov/2022/04/nurture-your-resilience](https://newsinhealth.nih.gov/2022/04/nurture-your-resilience)

# Progress in Parkinson's

## Deconstructing Dopamine Degeneration

Being diagnosed with Parkinson's disease is life changing. This brain disorder causes slow and rigid body movements. People can experience tremors, stiffness, or shaking. Eventually, they may have difficulty walking and talking.

Parkinson's is a degenerative disease. That means it gets worse over time. It develops when a certain type of nerve cell stops working normally or dies. These nerve cells make a chemical called dopamine. Your brain needs dopamine for making smooth, purposeful movements. Loss of dopamine causes problems with movement.

"We don't know what causes that dopamine loss," says Dr. Beth-Anne Sieber, an NIH expert on movement disorders. "But when it gets to a certain point, movement-related symptoms appear."

Both **genes** and other factors seem to play a role. Exposure to pesticides, heavy metals, and air pollution may raise your risk for the disease. Some-

times Parkinson's runs in families. But people who develop the disease don't usually have a family history of it. In most cases, it's not clear what causes the disorder. One main risk factor is age. It affects about 1% of people over age 60.

There's no medical test for Parkinson's disease. Diagnosis is largely based on movement-related symptoms. But scientists have learned that other symptoms can appear decades before any movement issues, Sieber explains. "These include constipation, loss of smell, changes in mood, increased anxiety, and sleep disturbances."

Scientists are trying to find ways to diagnose Parkinson's before the movement-related symptoms appear. One NIH-funded study is looking at why some people with a sleep disturbance called REM sleep behavior disorder—in which they physically act out dreams—may go on to develop Parkinson's.

Other studies are looking for molecules in the blood or other body fluids that can detect the start of disease before movement symptoms appear. These are called biomarkers. One possible biomarker is alpha-synuclein. This protein accumulates into toxic clumps in the brains of people who have Parkinson's.

Right now, alpha-synuclein can only be measured in the brain after death. Scientists are trying to find ways to measure it in the blood or spinal fluid, as well as with new brain imaging techniques. Such a biomarker could also be used to help track progression of Parkinson's and how well treatments are working.

There's currently no cure for Parkinson's. Treatments focus on managing symptoms and improving quality of life. A drug called L-dopa can help replace the loss of dopa-



mine. But it doesn't work for everyone. Other drugs that act through different chemicals in the brain may help with movement issues. Deep brain stimulation surgery may also be an option for certain people.

"NIH-supported research has shown that high-intensity exercise improves Parkinson's symptoms," says Sieber. Now, researchers are trying to determine how much and what types of exercise work best. They're testing treadmill running, cycling, and other programs.

Singing may also improve quality of life. It can help strengthen the voice and other functions like swallowing. The rhythm in music might help with walking and stability.

Starting an exercise program early on may help slow disease progression. Researchers are still trying to understand why. If you notice any signs of Parkinson's disease, talk with your health care provider. ■



### Wise Choices

#### Identifying Parkinson's Disease

Parkinson's symptoms can vary between people, but here are some common ones:

- Tremors or shaking in the hands, arms, legs, jaw, or face.
- Rigidity or stiffness of your body.
- Slowed movement.
- Difficulties with balance, speech, and coordination.
- Constipation or urinary problems.
- Depression and other emotional changes.
- Fatigue.
- Poor sense of smell.
- REM sleep behavior disorder (acting out dreams while sleeping).



### Definitions

#### Genes

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



### Web Links

For more about Parkinson's disease, see "Links" in the online article: [newsinhealth.nih.gov/2022/04/progress-parkinsons-disease](https://newsinhealth.nih.gov/2022/04/progress-parkinsons-disease)



## Health Capsules

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

### Melatonin Supplement Use Rising Among Adults

Sleep is important for your mental and physical health. But nearly a third of U.S. adults don't get enough. Some people turn to sleep aids for help. A new study found that the number of adults taking melatonin supplements to help them sleep has risen sharply.

Melatonin is produced by the brain in response to darkness. It helps cue the body that it's time to sleep. But studies have not consistently shown that melatonin supplements can help promote sleep.

Researchers looked at melatonin

use in 55,000 adults who took part in a national survey. The survey ran from 1999 to 2018.

Melatonin use increased from 0.4% of survey participants to 2.1% over the nearly two decades. The use of high doses—over 5 milligrams per day—rose from 2005 on.

Overall, high-dose melatonin use remained low. But these findings raise safety concerns. Dietary supplements are not regulated. Companies do not have to prove their products work. And sometimes, the amount of melatonin in a pill can

be as much as five times higher than what the label says.

Melatonin supplements appear to be safe for most people when taken for a short period. But information on the safety of long-term use and of taking high doses is lacking.

“Our findings highlight the need for clinical studies to look at the long-term safety of melatonin use. We also want to understand whether it can effectively help people with sleep problems,” says Dr. Naima Covassin at the Mayo Clinic, who led the study. ■

### Are You Overdue for a Cervical Cancer Screening?

Cervical cancer starts in the cervix. The cervix is at the lower end of the uterus, where a fetus grows. Screening for cervical cancer has dramatically reduced new cases and deaths. But many women are overdue for getting one.

Cervical cancer usually develops slowly over time. At first, it may not cause signs or symptoms. But it can be detected early with regular screenings. Screenings require a visit to your health care provider. They will collect cells from your

cervix with a brush and send them to a lab. The lab then examines the sample for the presence of HPV and/or abnormal cells. Nearly all cases of cervical cancer are caused by HPV infection, which is spread through sexual activity.

Experts recently updated the guidelines for how often women should be screened for HPV and cervical cancer. That may have caused confusion about when to get screened. In a recent survey, more than half of women said they hadn't

had a screening because they didn't know they needed it (see [go.usa.gov/xz5Ut](https://go.usa.gov/xz5Ut)).

Talk with your health care provider about how often you should be screened. Even if you've had the HPV vaccine, you still should be screened for cervical cancer. The current vaccines greatly reduce your risk for getting cervical cancer. But they do not protect against all cervical cancer. Learn more at [www.cancer.gov/types/cervical](https://www.cancer.gov/types/cervical). ■



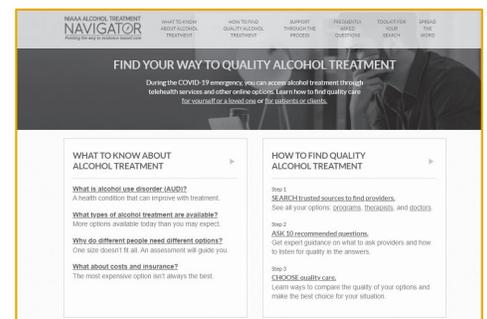
### Featured Website

#### Alcohol Treatment Navigator

[alcoholtreatment.niaaa.nih.gov](https://alcoholtreatment.niaaa.nih.gov)

Looking for alcohol treatment can feel overwhelming. NIH's Alcohol Treatment Navigator can help. It offers a three-step road map to find

science-backed care that can raise your chance for success. You can search for alcohol treatment for yourself or a loved one.



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