# NIII News in Health

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### The Power of Peers

### Who Influences Your Health?

Do birds of a feather really flock together? The science says yes. People do tend to choose friends who are similar to them. You also become more like your friends over time. And that can influence your health.

Many behaviors spread socially. Examples include how much you exercise, how much alcohol you drink, whether you smoke, and what foods you eat.

Scientists are still trying to untangle why that is.
Studies have found that activity in certain brain areas changes when other people are around. That can affect what you

choose to do.

But this work also suggests that you can harness the power of social relationships to gain healthier habits—and motivate others to do the same.

Social Influence • "People care about what others think across all different age groups—and that influences how much they value different ideas and behaviors," says Dr. Emily Falk at the University of Pennsylvania. She studies how social networks affect decision making. This is called social, or peer, influence.

Teens are especially responsive to peer influence. That's because their brains undergo changes that make them highly attuned to social situations. At the same time, the reward system in the teen brain becomes extra sensitive.

The reward system is a brain circuit that causes feelings of



pleasure. It's activated by things we enjoy, like eating good food. It's also activated by social rewards, like getting a compliment.

And teens are just learning to navigate the social world. Understanding other people's values and being influenced by them are important parts of socializing. Being influenced on things like clothing choices and musical taste can help teens learn to fit in and make friends. But taking part in risky behaviors, like drinking alcohol or smoking, can lead to health or legal consequences.

"Research shows that even just having another peer around can change the reward response in the brain and also the risk-taking tendencies of teenagers," says Falk. Her team studies how peers affect teens' driving behaviors and smoking decisions.

Some people seem to be more easily influenced than others, too. They may be more sensitive to feeling included or excluded by others. Or they may be more sensitive to social signals, like the tone of someone's voice or their body language.

Dr. Mary Heitzeg's team at the University of Michigan is doing research to better understand how a person's biology and reactions to social situations affect whether they develop substance use or mental health problems later in life.

Using brain scans, the team is looking at how teens' brains respond to being socially included or ex-

cluded. They're also looking at how the brain's reward system responds to different situations.

Heitzeg's team is part of a large 10-year effort, called the ABCD Study, to understand the factors that influence teens' health and risk behavior in the long term. Factors can include families, friends, schools, neighborhoods, and communities.

"Adolescence is such a risky period," says Heitzeg. "That's when sexual initiation happens, initiation and escalation of substance use happens, as well as other types of risky and delinquent behaviors, like risky driving."

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But it's also a time that peer influence can help teens thrive if it gets them more involved with their community or helps them learn behaviors to get along with others, like how to cooperate or be empathetic.

#### Peer Quality, Not Quantity •

Positive and negative peer influences can affect more than just your behavior. They can also change the way you feel.

Studies show that, in general, the more friends you have and the more time you spend with them, the happier you are. Friends give you people to share your feelings with, to get new perspectives from, or to just do fun activities with.

But it's the quality of those friendships—not quantity—that really makes the difference. Quality of friendships has been linked to higher life satisfaction and better mental health.

"We've all experienced letting a friendship go because it didn't feel great," says Dr. Rebecca Schwartz-Mette of the University of Maine. Her lab studies how peer relationships affect the emotional development of children and teens.

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Office of Communications & Public Liaison Building 31, Room 5B52 Bethesda, MD 20892-2094 email: nihnewsinhealth@od.nih.gov phone: 301-451-8224 Friendships you feel you want to let go of may be low quality. They might be fraught with conflict, criticism, and aggression. For youth, low quality friendships are linked to poor academic performance and behavioral issues.

High quality friendships provide understanding, support, and validation of your self-worth. These types of friendships are more stable and are more satisfying.

Spending time with friends can be especially helpful for people with anxiety or depression. However, Schwartz-Mette's studies have shown that depression can also be worsened by certain friendship qualities. One is called corumination.

"Co-rumination is basically when people get together and talk excessively about everything that's going wrong and how bad they feel," she explains. "With that person, they feel understood, validated, and that this person is emotionally close to them. But they get more depressed because they're focusing their attention on negative things."

Research suggests that it may help to refocus such friendships. Talk about both positive and negative things in your day. Look for healthy activities to get out and do together, like going for a walk. Encourage each other to keep up healthy habits like physical activity, healthy eating, and getting a good night's sleep.

"Noticing that our behavior is influenced by other people, we can be intentional and try to focus on the people who are doing the things we want to get into ourselves," Falk explains. "Sharing your healthy habits with other people could make a real difference to somebody else." And to yourself.

Parents can help guide their kids toward more positive social experiences, too (see the Wise



### Wise Choices

### Fostering Positive Friendships

Parents can help guide their kids toward healthier friendships. Here are ways to help:

- Stay involved. Talk with your children about their lives and activities. Knowing what goes on can help you better guide them toward positive, healthy experiences.
- Keep an eye on social groups. Though children may identify with a certain peer group for a period of time, they often move from group to group. Try to steer them toward peers who support them in healthy ways.
- Encourage kids to do healthy activities when they're with friends. For example, going for a walk or hike, playing recreational sports, or volunteering.
- Provide ways for kids to take healthy social risks. For example, find opportunities for teens to get involved with their community and meet new people with different perspectives. Or to meet someone who can teach them about a topic of interest.
- Share examples from your own life. Explain how you've found ways to meet new people and what activities you enjoy doing with others. Model the behaviors you'd like to see.
- Create a sense of belonging and acceptance. Kids can learn about healthy relationships from their family experiences.

Choices box for tips). But everyone can benefit from high quality friendships that help you nurture healthy habits. ■



For more about peer influence, see "Links" in the online article: newsinhealth.nih.gov/2021/09/power-peers

### Recognizing RSV

### More Than the Common Cold

COVID-19 measures lessened how often we get sick from many other viruses. But one common virus has been on the rise this year. It's called respiratory syncytial virus, or RSV.

RSV is usually more common in the fall, winter, and spring. But this year, infections have surged over the summer. This is likely because of the lifting of COVID-19 precautions, like masking and social distancing, says Dr. Barney Graham, a physician who studies viruses at NIH.

Almost everyone catches RSV before the age of 2. It's one of the most common causes of illness in children. But unlike many other viruses that infect the lungs, you can catch RSV over and over again.

"RSV has a number of ways of evading the **immune system**," says Graham. "So people are re-infected with RSV on average every three to 10 years."

RSV infects the cells that line your lungs and breathing passages. Many symptoms mimic the common cold, like a runny nose, loss of appetite, and coughing or wheezing.

Symptoms usually stay mild in older children and adults. But some people are at risk of more serious disease. These include infants, older adults, and people with a weakened immune system.

Some people develop pneumonia or **inflammation** in the lungs from RSV. Watch for symptoms that get worse over time or trouble breathing or drinking fluids. People with these symptoms should see a health care



#### Immune System

The body's defense against germs and microscopic threats.

#### Inflammation

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

provider right away. A blood test can show if you have RSV or another virus with similar symptoms.

For mild cases, overthe-counter fever or pain relievers may help reduce symptoms. But people with more serious cases may need treatment in a hospital.

RSV spreads easily between people. It can travel in droplets from a cough or sneeze. It can also stay on surfaces like doorknobs and tables. That means you can catch it if you touch an infected surface and then touch your face.

Most people who get mild RSV feel better in a week or two. But people can still spread it even after they stop showing symptoms.

NIH researchers have been working for decades to develop RSV vaccines. Recently, scientists have been able to take detailed pictures of proteins on the virus's outer surface. This allowed them to create a vaccine that better targets the virus.

In early research, "this vaccine has turned out to be radically better than any tried before," Graham says. Researchers hope that a vaccine will soon be available for at-risk groups. Such a shot may be able to protect newborns by vaccinating their mothers before birth, he adds.

An RSV vaccine could do much more than prevent infection, says Graham. Kids who get severe RSV as infants have a higher risk of other lung problems, like asthma. So, a vaccine might prevent some cases of future lung issues as well.

Until there's a vaccine, good hygiene is the best way to avoid getting RSV and other viruses.





## Wise Choices Protect Against

- Avoid close contact with people who have cold-like symptoms.
- Wash your hands often with soap and water for at least 20 seconds. Use alcohol-based hand gel if you're unable to wash them. Be sure it contains at least 60% alcohol.
- Clean and disinfect surfaces that are frequently touched, like doorknobs, toys, and mobile devices.
- Avoid touching your face with unwashed hands.
- Cover your coughs and sneezes with a tissue or upper shirt sleeve, not your hands.
- Stay home when you're sick.

See the Wise Choices box for tips on staying healthy. ■



For more about RSV see "Links" in the online article: newsinhealth.nih.gov/2021/09/recognizing-rsv



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

### **Few Receive Medications for Alcohol Problems**

About 14 million adults in the U.S. have alcohol use disorder (AUD). There are effective treatments. But a recent study found that they are rarely used.

People with AUD often aren't able to control their drinking. It can affect their health, relationships, and job. Treatments can help. These include talk therapy and FDA-approved medications.

Three drugs have been approved to treat AUD. These help people with AUD overcome alcohol cravings. They can also help prevent a return to problem drinking.

Researchers analyzed data from nearly 43,000 adults who participated in a national survey on drug use and health. The study found that about 5.6% of U.S. adults had AUD in 2019.

Treatment rates were low. Only 7.3% of people with the disorder received any form of treatment. And only 1.6% of the people with AUD were treated with medications.

Those taking AUD medications were more likely to live in a city, which tend to have more alcohol use treatment services. It also appeared those with more severe AUD were more likely to take medications.

Medications can be an important tool for overcoming problem drinking. "We need to find a way to make these medications a more routine part of clinical care," says NIDA Deputy Director Dr. Wilson Compton, senior author of the study.

"Far too few people with AUD receive treatment of any type, including medications," says NIAAA Deputy Director Dr. Patricia A. Powell, who co-authored the study.

### Learn About Burn Care

Burns are skin or tissue damage, usually caused by heat. Burns often happen in the home. Some are caused by fire. They can also be caused by hot liquid, steam, and certain chemicals.

Burns are defined by how deep they are and how large an area they cover. First degree burns are the least serious. They affect only the thin top layer of skin. A sunburn is a common example. They usually heal on their own within a week. Seconddegree burns damage the layer of skin below the outer layer as well. They may leave a scar. Third-degree burns damage or destroy the entire thickness of the skin. They require skin grafts—natural or artificial skin to cover and protect the body while it heals.

It's important to seek medical care quickly for deep or large burns. Serious burns require professional medical care. Some can even be lifethreatening. But research advances over the past few decades have increased the chances of survival for people with severe burns.

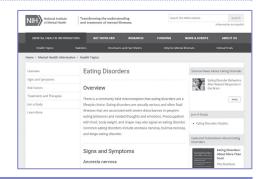
Minor burns can often be treated at home. First, clean the area with cool water and dry. Then cover with sterile gauze or a non-adhesive bandage. Avoid breaking blisters because this can cause infection. Call your doctor if the burn has not healed after several weeks or shows signs of infection. These include increased pain, swelling, and redness.

For more information on burns and burn research, visit www.nigms. nih.gov/education/fact-sheets/
Pages/burns.aspx.



www.nimh.nih.gov/health/topics/eating-disorders

Eating disorders are serious and can be fatal. Obsessions with food, body weight, and shape may be signs of an eating disorder. They affect all types of people. It's important to seek treatment early. Learn more about the signs and treatments for eating disorders.



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