

By Sarah Webb

Coping WITH Cancer

Teens have special needs
as they face a serious illness.

Jacquelyn W., 15, of rural Missouri, is a ballet dancer, an accomplished artist, and a cheerleader. Since she was 2 years old, Jacquelyn has faced cancer three times.

At some point in their lives, many people will get cancer, but most cancer patients are adults. Having cancer is both serious and scary, and some teens get very sick or even die from their illness. But many survive their treatments and look forward to bright futures.

What Is Cancer?

Every tissue in the human body—whether it's the heart, the brain, the bones, or the blood—is made from individual cells. All those cells have programs encoded by their genes to do certain tasks. For example, a blood cell's program tells it to carry oxygen to tissues around the body. Those cells also have a point when they're supposed to die either because their job is done or because they need to make room for new cells. As long as those programs work correctly, our bodies remain healthy. But if a cell's program develops a glitch, it can cause serious problems.

"Cancer is not one disease, but actually a lot of different diseases. What is the same is

that all start with one cell that is no longer controlled," says Dr. Cindy Schwartz at Hasbro Children's Hospital in Providence, R.I. "Two things happen: The cells can grow so much so that they crowd out the other cells; or they might grow at the right rate, but they just don't die when their job is over."

As cells divide, they make copies of their genetic program, including mistakes. Those abnormal cells take up space and keep normal cells from functioning properly. In addition, as cancer grows, the diseased cells can move into other parts of the body and multiply there. Different cancers arise in different cells of the body—for example, in the blood or the brain.



Background: Howard Sochurek/Corbis; Hands: Corbis



Cancer can happen to any person at any age but is relatively rare in children and teenagers. (See “Hot Spots.”) Yet every year, approximately 12,400 people under the age of 20 in the United States are diagnosed with cancer. Although some cancers in adults are linked to smoking cigarettes or eating a poor diet, doctors can’t pinpoint the cause of most childhood cancers.

Treating Cancer

Cancer is a serious problem, and doctors work with teens and their families to make decisions about how to treat the disease. First, they might test a tumor—a clump of abnormal

cells—to find out whether it’s malignant (cancerous) or benign (noncancerous). Doctors can surgically remove some tumors, depending on the type and location of the tumor; but not all cancers are operable, such as those in blood cells that move throughout the body. Radiation treatments and chemotherapy, treatment with strong medicines, can be used to kill many cancer cells that are in the body. “Kids are often so healthy when the cancer starts that they handle therapies well, usually better than do adults,” says Schwartz.

Doctors try to get rid of all the cancer cells because any leftovers can cause the disease to return. When all the signs and symptoms of

'We won't be satisfied until 100 percent of children [and teens] with cancer are cured.'

—Dr. Gregory Reaman

the disease are gone, the cancer is in a state called remission. At that point, teens still have to see their doctors often over the next few years to monitor their health.

Over the past 20 years, cancer treatments have improved, and overall, almost 80 percent of teens survive their cancers. Doctors and scientists are working hard to make those statistics even better. "We won't be satisfied until 100 percent of children [and teens] with cancer are cured," says Dr. Gregory Reaman, an oncologist and a professor of pediatrics at George Washington University School of Medicine and Health Sciences and chair of the Children's Oncology Group.

Individual Challenges

Because many of the cancers that affect teens also affect younger kids, most adolescents are treated at pediatric cancer centers. But teens have different needs than younger children do, and hospitals typically have a floor or a wing especially for them that doesn't surround them

with toys and cartoon characters painted on the walls. The cancer centers also have supportive staff who can help teens deal with the physical challenges and the emotions surrounding their illness.

Treatments can involve being in the hospital for weeks or months, away from friends, school, and activities. Kristy Devine, now 24, had osteosarcoma, a bone cancer, in her left leg when she was 10. After three months of chemotherapy, doctors removed part of her left leg bone and replaced it with a bone from a cadaver that would continue to grow with her. Devine then had six more months of chemotherapy treatments. Physical therapy helped her learn how to walk again. (Devine still has her leg, but it's weaker than her right leg.)

Chemotherapy and radiation can cause physical changes. Cancer patients often lose their hair, and some gain or lose weight during treatment. Going to summer school was difficult for Jacquelyn when she was bald and her face was puffy after cancer treatments.

Prevent One Cancer

Melanoma, a type of skin cancer, is one of the five most common cancers diagnosed in U.S. teens ages 18 and 19. It's also a common cancer among adults. One risk factor for melanoma is a history of bad sunburns and exposure to ultraviolet (UV) light from the sun or tanning beds. Doctors advise people of all ages to use sunscreen or sunblock and to avoid extra exposure to UV radiation.



Getty Images

Jacquelyn and others like her don't have to go it alone. Teens with cancer are often helped by spending time with others who've had the same experiences. When Devine was going through chemotherapy, she spent Saturday mornings with a support group called ChemoKids, where she and other youngsters who were undergoing cancer treatments did arts and crafts together.

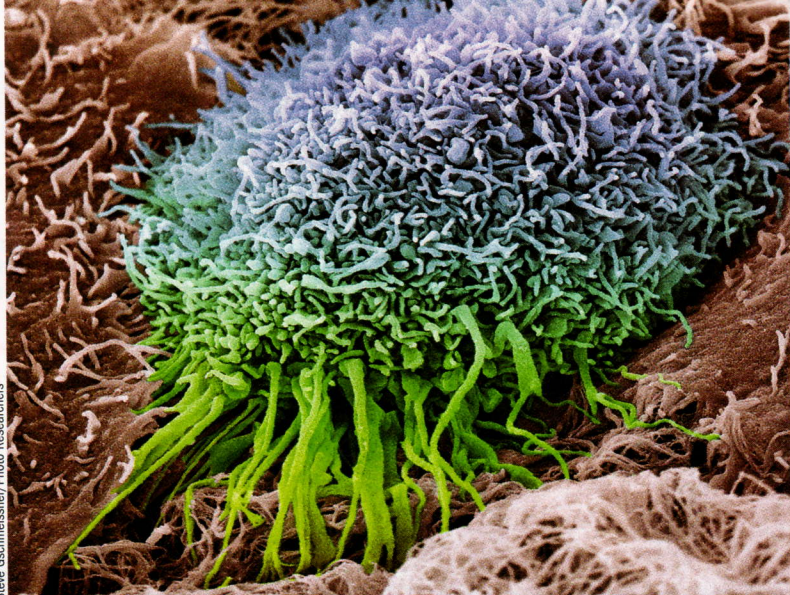
Emotional Support

Beyond the treatments, having cancer involves dealing with all kinds of emotions. Before Devine's diagnosis, the only person she had ever known with cancer had died from a brain tumor. Devine was scared, angry, and confused. "This experience will change you and make you a stronger person," she says. It also made her realize how valuable friends and family are: "They will help you conquer the pain and anger and devastation that you are feeling."

Optimism is key for teens with cancer. "Try your best to stay positive," says Gregory L., 18, of Naples, Fla., who is battling colon cancer. "That's the biggest thing—to keep a good attitude. It makes a huge difference when you're being treated."

Little steps mean a lot. Billy R. of Orland Park, Ill., missed most of third grade during treatment—including a bone marrow transplant—for leukemia, cancer of the blood. Even if he wasn't hungry, his parents pushed him to eat at least a few bites. "I love baseball," notes Billy, now 16, so after treatment, he'd go to a baseball training program. "That was my physical therapy," he says.

Jacquelyn had to go to Texas for seven months when she was 11 for leukemia treatment, because her doctor had moved there. During Jacquelyn's time away, she felt she had her whole town's support. One friend talked to her on the phone regularly and sent cards. Other friends called her as often as they could. When it was time for Jacquelyn to come home to Missouri, a teacher and some of the students, as well as other members of the community, lined the road to her house with welcoming signs and posters. "Once we hit the county line, there were



Steve Gschmeissner/Photo Researchers

A close-up of a skin cancer cell. The many microvilli (small tentacles) on the cell's surface are typical of cancer cells. The larger projections (green) allow the cell to move and spread.

Where the Most Common Teen Cancers Occur

- ◆ blood cells (leukemia)
- ◆ brain and nervous system
- ◆ immune system cells (lymphoma)
- ◆ bones and joints*
- ◆ testicles**
- ◆ skin (melanoma)**

*more common among young teens **more common among older teens

Source: National Cancer Institute, SEER Cancer Statistics Review, 1975-2004

posters along the road that said, 'Almost there,'" Jacquelyn says. When she got to her house, her aunt and uncle had hung balloons and a banner that said, "Welcome Home, Jac." Other people had also left balloons and gifts.

'Just Part of My Life'

Although having cancer was incredibly difficult, Devine feels blessed by the experience and the people who helped her through it. Her first job after college was working to raise money for CureSearch, an organization that researches childhood cancer. Jacquelyn donates artwork for cards, T-shirts, and other items that raise money for childhood cancer research.

After enduring his own tests and treatments, Billy is thinking about becoming a doctor. He's very open about his cancer with friends. "It's just part of my life, and it's who I am," Billy concludes. **CH2**