It's still your best shot

With the widespread influenza epidemic on the rise, the flu shot has been called into question. A Mount Sinai Medical Center cardiologist offers up the facts.

THE SPECIALIST: Dr. Mary Ann McLaughlin, medical director of the cardiac health program at Mount Sinai Medical Center

As a 17-year veteran of cardiology, McLaughlin's life work focuses on improving the quality of cardiac health care in the community. With flu season at its peak in February in recent years, Dr. McLaughlin, the mother of two young sons and owner of a wheaten terrier, recommends the flu vaccine to all her patients.

THE BIG STORY

Cases of the flu are on the rise. Last week, the number of states reporting widespread flu activity jumped to 31, from 11 states the week before. A researcher at Mount Sinai found that the flu virus spreads faster in cold temperatures, which could explain this spike. Another reason may be that recent strains of flu don't match those administered with the flu vaccine, leading people to question how well the shot really works.

SYMPTOMS OF THE FLU

A routine flu often manifests itself in high fever, chills and muscle aches. What distinguishes a severe case is trouble breathing and wheezing. "If you develop these symptoms," McLaughlin says, "you should see your doctor immediately, because you could be developing pneumonia."

THE FLU SHOT

Each vaccine shot contains three viruses, and there's no risk of catching the flu from it. "The injection is a dead virus," McLaughlin says.

Getting a vaccine reduces your chance of catching the flu 70% to 90%. But suffering through an injection doesn't mean you're in the clear. "You can still get the flu — usually because you were exposed 24-48 hours before you got the shot or you were exposed to a strain not included in your vaccine."

THE EFFECTIVENESS

Unfortunately, there is a less-than-ideal match between the viruses circulating and the vaccine. Less than half of the flu strains reported are not a good match with the vaccine's strains. But, we still know that taking the flu vaccine should make you get a milder case if you do catch the flu, and then you'll be less at risk to develop serious complications like pneumonia or a bacterial infection.

QUESTIONS FOR THE DOCTOR

Patients often ask Dr. Mary Ann McLaughlin a similar set of questions. Her responses help them decide whether the shot is right for them.

What are the potential side effects?

The most common are redness and a slight swelling at the site of the injection. "Some people get a low-grade temperature, which is their immune system reacting to the vaccine," McLaughlin says. "You can reduce your risk of getting a fever by taking Tylenol right after the flu shot."

Is the vaccine dangerous to children?

Flu vaccines are traditionally made with thimerosal, a mercury derivative that some people worry is linked to autism. They now make flu vaccines without thimerosal for children ages 2-6.

Do I really have to get an injection?

For those needle phobes, there's a live vaccine nasal-spray option such as FluMist; however, it's not recommended for young children or people with heart disease because they are more susceptible to catching the flu from the spray.

Mount Sinai Heart's Dr. Mary Ann McLaughlin recommends the flu shot not only for the prevention of a nasty "bug" but for maintaining a healthy heart.

WHO SHOULD GET THE SHOT

With widespread cases of the flu, the end of February doesn't mean we're in the clear. McLaughlin says, "Flu season actually extends from October through May."

If you've already gotten the flu this season, you still may not be in the clear because there are many different strains of the illness that you may not be immune to.

Finally, if you have heart problems, getting the shot now may save your life. Recent studies have shown that patients with coronary artery diseases who receive the vaccine have fewer heart attacks.

Doctors are still conducting research to explain the correlation between vaccine shots and reduced heart attacks, McLaughlin says. One theory is that when the flu causes an inflammatory response, those inflammatory particles can attach to the cholesterol in your system and can build up blockages in your arteries.

It's especially important for those 50 and older and those with a history of chronic heart disease because they are likely to become severely ill if they do contract the virus.

On the other end of the spectrum, young children are also at higher risk. McLaughlin recommends flu shots for children 6 months or older. "Their immune system isn't as strong. If they're exposed to the flu virus, they're susceptible to secondary diseases, like pneumonia and dehydration."

For related reasons, doctors suggest that both caregivers and pregnant women be vaccinated. Vaccinations are essential for diabetics, patients with chronic kidney disease, residents of long-term-care facilities, anyone taking steroids (including those for asthma) and anyone who has an impaired immune system.

WHO SHOULDN'T GET IT

Allergic to eggs? Not only are omelets out of the question, so are flu shots, as eggs are used in preparing the vaccine. Also, those who have had allergic reactions to the shot in the past should skip the injection again.

NEW BREAKTHROUGHS

A British-American company has reported that it's in phase one of trials for a universal vaccine; this vaccine would intend to protect against "all strains of the human flu virus. It would be similar to getting the polio vaccine, where it's one shot for life. People could be getting this vaccine in two years."

WHAT YOU CAN DO

Do your best to avoid the flu the old-fashioned way: Wash your hands during flu season. After getting a flu shot, it's the second most important thing you can do. Money isn't usually an issue — many places offer free shots, including offices, drugstores, senior centers and libraries. Find out where to get the flu shot in your neighborhood from now through June at www.nyc.gov.