



To Flu or Not to Flu?

It's cold and flu season again, but is a vaccine really the best way to protect you and your family? [by Sarah McCoy](#)

Juggling a full-time job and a 2 year old, Christy Fore counts on the flu vaccine.

"If my daughter gets sick, I care for her. Then I catch it and miss work to nurse both my daughter and myself back to health," Fore says. "If you're lucky, it only lasts a few days, but I've been there. The flu doesn't operate according to our schedules. I give my daughter the shot as a precautionary measure."

Roughly 20 to 40 percent of previously healthy children contract influenza each year, accounting for nearly \$12 billion annually in medical costs. Nationwide pediatric flu deaths were first reported during the 2003-2004 flu season; there were 153 deaths. In 2007-2008, there were 84. The number is down, and many experts chalk it up to the national effort toward flu shot education and implementation.

In February 2008, the Centers for Dis-

ease Control and Prevention recommended that all children ages 6 months to 18 years receive yearly flu shots. This came just two months before a separate study from the CDC that said the 2007-2008 flu vaccine was the least effective vaccine in a decade.

"So far, the track record has been good for us," Fore says. "We haven't had the flu since we starting taking the shots."

What a Strain

Not all parents are as lucky as Fore. Many have had their children vaccinated and they still got the flu, so a lot of people don't think the flu shot works that well. These parents are partially right.

The flu virus is shift. There are numerous strains and every year the demographics of the viral population change: some die, some are born and some are renewed. To complicate things further, there are hun-

dreds of millions of flu shots given out each year, so the scientists creating the vaccine must decide its contents well before the first Kleenex tissue is plucked, because it takes months to fill that amount of flu vaccines. They make an educated guess about which three strains are most likely to migrate across the globe before they ever do.

These are then injected into sanitized chicken eggs for separate production. The viruses incubate in the eggs before being harvested, purified, virally fragmented then combined into one vaccine for Food and Drug Administration testing and approval. From August through November, both the inactivated and the live-attenuated vaccines are shipped out and administered to the public.

What's the difference? According to Dr. Carol J. Baker, professor of pediatrics at Baylor College of Medicine and a member of the CDC's Advisory Committee on Immunization Practices, the flu shot contains the inactivated vaccine, which has no live flu virus in it. The nasal spray contains live but extremely weak viruses.

Even though one does contain live viruses, Baker says neither form can give a person the flu.

Taken for Granted

In addition to the occasional inefficacy of the flu shot, some parents don't feel the flu is dangerous enough to warrant a vaccine. Since the advent of modern medicine, the flu virus has never been an efficient killer of any age group. In the last 10 years, the percentage of people who have died from contracting the flu has dropped, minutely, but Canadian researchers believe the flu shot has nothing to do with it. They say it is due to better medicine and people being better educated about their health (knowing when it's time to call the doctor). They also say people who typically get the flu shot are more proactive with their health. These are the same people who are less likely to die of cancer because they are screened each year.

But children are more susceptible to getting the flu than healthy adults.

"The reason young children are more likely to contract (the) flu is that they haven't lived long enough to be exposed to different flu strains that might give them partial immunity," Baker says.

Warning Shot

Despite the assurances of doctors, many parents are afraid that the vaccine could somehow harm their child.

"It is much, much more likely that a child could get the flu from his or her classmates if they aren't vaccinated. Parents don't think of this when they worry about a school-based live vaccine program," says Dr. James C. King Jr., a professor of pediatrics at the University of Maryland. "The real flu virus is a whole lot more dangerous than this wimpy live flu in the vaccine."

According to King, the only dangers are soreness, redness, mild swelling and brief pain at the injection site. A slight fever, fatigue and decreased appetite are uncommon but do occur. And the chance of a child getting infected by being around another child who received the live vaccine is very remote. There is no chance of over vaccination, and with the introduction of thimerosal-free flu vaccines, those who believe the mercury-containing preservative might cause autism now have an option.

There are true perils to the flu virus. "In

Nature's Course

When the flu strikes, many pass by the over-the-counter medicines and head straight for natural alternatives.

Made from the extract of Muscovy duck heart and liver, Oscillocochinum has been clinically proven to reduce severity and shorten duration of illness. In trials, patients using Oscillocochinum showed significant improvement in their health within 48 hours with no side effects or reported drug interactions.

Another option is vitamin C, an antioxidant the body uses to maintain a healthy, strong immune system. Some studies have found that it can help ward off flu and colds. Zinc lozenges have also grown in popularity. Research published in the *Annals of Internal Medicine* showed that zinc lozenges decreased flu symptoms and helped patients feel better faster.

All of these homeopathic remedies are available at local pharmacies and supermarkets or online.

my hospital-based practice, I see healthy children die or spend days or weeks in the hospital from complications of influenza infection. These aren't just infants or young children with underlying medical conditions, but healthy kids," Baker says.

On this year's CDC advisory panel, Baker recommended implementation of flu vaccination programs. "Why take a chance with your child's health?" she says.

Currently, there isn't a nationwide school vaccination program. However, in 2004, a school-based vaccination study was conducted at 28 elementary schools in four states: Maryland, Texas, Minnesota

and Washington. The nasal spray influenza vaccine was administered to 2,717 healthy students. These students were compared with students at non-vaccinated control schools. The results: a 23 percent to 36 percent reduction in flu illness.

"This is not a new idea. Arnold Monto in the 1970s did a school-based influenza program using the 'shot' and found that it helped protect the entire community," says King, the principal investigator of the study. "Also, school-based polio vaccination was a key component in the effort to eradicate polio from the United States 50 years ago." ☞

What About Tamiflu?

In 2005, the Food and Drug Administration approved the use of Tamiflu in the prevention and treatment of pediatric influenza and those in close contact with an affected person. However, the FDA cautions: "Tamiflu is not a substitute for the flu vaccine. Patients should continue receiving an annual flu vaccination."

According to the FDA study, the rate of children developing flu symptoms in a flu-diagnosed household reduced from 17 percent in the no prevention treatment group to 3 percent in the group receiving Tamiflu. The pediatric benefits mirrored previous adult studies.

"I'd use it if there was an outbreak situation...while also giving the flu vaccine," says Dr. James C. King Jr., professor of pediatrics at the University of Maryland School of Medicine.

Tamiflu must be administered within 12 to 48 hours of flu symptoms. At approximately \$75 for 10 capsules, the product is more expensive than the flu shot without the guarantee of future prevention. Side effects include nausea, vomiting, headache, fatigue and rare cases of severe skin rash.

